

VICTORIAN YEAR BOOK 1998

Number 110

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**VICTORIAN
YEAR BOOK**

1998

NUMBER 110

**STUART JACKSON
REGIONAL DIRECTOR**

**AUSTRALIAN BUREAU OF STATISTICS
VICTORIAN OFFICE**

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PREFACE

The Australian Bureau of Statistics (ABS) is Australia's official statistical agency. The mission of the ABS is to assist and encourage informed decision-making, research and discussion within governments and the community, by providing a high quality, objective and responsive national statistical service.

In order to produce official statistics, the ABS undertakes a large number of separate collections, ranging from periodic censuses to regular surveys to provide current social and economic indicators. This 1998 edition of the Victorian Year Book presents a wide range of statistical information on the social, demographic and economic structure of Victoria and represents a first point of reference for people throughout the community endeavouring to satisfy their statistical needs.

The feature article for 1998, the 110th edition of the Victorian Year Book, is on multimedia. This article is written by Multimedia Victoria, which was established by the Victorian Government to provide leadership, facilitate growth and provide other supports for the development of the Victorian information industries. This feature defines multimedia, discusses Victoria's ability to embrace this technology and position Victoria as a multimedia hub, outlines the Victorian information industries and highlights the Governments initiatives in this industry.

Special articles in this edition have been provided by : The Department of Treasury and Finance, Parks Victoria, Australian Red Cross Blood Service—Victoria, Crimestoppers, Tourism Victoria, Monash University Accident Research Centre, The Department of Natural Resources, The Melbourne City Council and the Australian Chamber of Manufacturers.

All sources have been carefully referenced to assist those seeking more detailed data. If further information is required ABS publications can be accessed through public libraries, obtained via our subscription service or purchased on an ad hoc basis. An extensive range of products and services, including a comprehensive consultancy service, is also available through the Information Services Section on (03) 9615 7755.

The production of the Year Book has involved significant input from a number of individuals within the ABS and from various other organisations who have contributed material for inclusion. I would like to take the opportunity to acknowledge the efforts of all those involved in bringing together this edition of the Victorian Year Book.

Stuart Jackson
Regional Director
March 1998

GENERAL INFORMATION

Symbols

The following symbols mean:

n.a.	not available
n.e.c.	not elsewhere classified
n.e.s.	not elsewhere specified
n.f.d.	not further defined
n.p.	not available for publication, but included in totals where applicable
n.y.a.	not yet available
p	preliminary – figure or series subject to revision
r	figure or series revised since previous issue
..	not applicable
—	nil or rounded down to zero
—	break in continuity of series (where a line is drawn across a column between two consecutive figures)
*	subject to sampling variability too high for most practical purposes

M, males; F, females; T, total

Other forms of usage

The following abbreviations are used for the titles of the Australian States and Territories and Australia: NSW (New South Wales), Vic. (Victoria), Qld. (Queensland), SA (South Australia), WA (Western Australia), Tas. (Tasmania), NT (Northern Territory), ACT (Australian Capital Territory), and Aust. (Australia).

Yearly periods ending 31 December are shown as a single number, e.g. 1995. Yearly periods ending 30 June are specified as the years spanned e.g. 1995–96. Other yearly periods are specifically indicated.

Values are shown in Australian dollars (\$) or cents (c) unless another currency is specified.

All data are presented in metric terms.

Where figures have been rounded, discrepancies may occur between sums of the component items and totals.

Availability of ABS products and services

Information regarding the availability of ABS data can be obtained from the Information Services Section, Australian Bureau of Statistics, Box 2796Y, GPO, Melbourne, 3001, phone (03) 9615 7000. All publications issued by the ABS are listed in the *Catalogue of Publications, Australia* (1101.0) which is available from any ABS Office.

This and other publications are available through ABS Subscription Services, Freecall 1800 020608.

Multimedia

Photo:

CD-Rom

Delete keylines

VICTORIA IN THE INFORMATION AGE

This article has been supplied by Multimedia Victoria, Department of State Development.

Introduction

The information age is emerging from and being hastened by a number of simultaneous, world-wide developments which impact to improve and diversify communications and create new ways of doing business, along with new ways of being entertained and educated.

The convergence of telecommunications, computing and content activities is giving rise to new media forms for the delivery of information/entertainment products. Advances in digital technology are making possible the transmission of multiple media types (*all forms of information* described as *content*)—on common infrastructure—be it voice, vision, audio or print—and potentially through a variety of platforms—whether it be via telephone, cable, the Internet or wireless.

Rapid advances in both computing speed and memory, and transmission capacities, coupled with simultaneously falling prices for computing power, have widened the impact of information and communication technologies (ICTs). It is becoming increasingly more affordable and feasible for business as well as private citizens to use computers and to link into the World Wide Web. The phenomenal growth in the size of the on-line community demonstrates the potential for social and commercial interaction made possible by the advances in ICTs for business, government and personal use.

These global trends are creating a highly complex and dynamic set of circumstances. The economic, social and political impacts are likely to be significant if not revolutionary.

The information industries

The information industries—comprising information technology (IT) hardware and software; telecommunications, telecommunications and IT services and content industries—are amongst the fastest growing and significant of all global industries. In the past decade parts of these industries have grown at rates twice that of most industries—for example global IT markets (measured by revenues of primary vendors) grew at average rates nearly twice that of gross domestic product worldwide. (1)

What are the information industries?

There is no universally accepted definition of the composition of the converging industries of telecommunications, computing and broadcasting—the “new information industries”. Indeed, there is a plethora of differing terminologies describing its activities. Generally the information industries are taken to include(2):

Information and Communications Equipment:

- line, transmission and broadcasting equipment;
- switch, LAN/WAN and data equipment;
- terminal and peripheral equipment;
- computer equipment.

Communications Services:

- basic telephony services;
- advanced telephony services (e.g.. resale, callback);
- connection services and transmission;
- leased line and packet switched data network services.

Information Services:

- higher level and network services (e.g.. electronic data interchange, electronic funds transfer, video conference);
- professional services (e.g.. consulting, systems integration, education and training);
- networks and services (e.g.. internet service provision, pay-TV networks);
- computer, communications and software services (e.g.. data processing, outsourcing).

Information Products:

- network software;
- packaged software;
- systems software;
- networked content (e.g.. on-line publications, database content, multimedia).

Some descriptions of the information industries have a broader focus but the main issue is a recognition that a number of disparate activities are becoming linked in a value-adding process.

It is understood that ABS in cooperation with agencies from a number of countries are participating with the OECD to develop a standard description of the sector.

Estimates of the size of the global information industries

The following estimates may be taken as indicative:

- In 1995, the International Telecommunications Union (ITU) estimated that the global *info-communications* market was worth US\$1,370 billion.

The ITU defined the composition and estimated the shares of the total Info-communications markets as follows:

- Telecommunication services 44%
- Telecommunications equipment 14%
- Computer hardware 17%
- Computer software 8%
- Computer services 18%

On the conservative estimate that the info-communications market grew at 5% per annum for the five years after 1995, by 1999 the market would have been valued at greater than US\$1,600 billion. (3)

- As at 1993, if elements of the *content* industries were included, such as broadcasting and audio-visual entertainment, then the global *info-communication sector* would have been valued at US\$1,352 billion in 1993. (4)

The impact of the information industries

Estimates of the size of the information industries underestimates their true significance. The outputs of these industries are both transformative and enabling as they are creating significant productivity enhancing inputs into activities across the economy.

A study of the competitiveness of the Australian information industries conducted by Charles, Allen and Buckeridge (5) notes that there are four main areas where information technology, electronics and communications (ITECs) will be significant inputs:

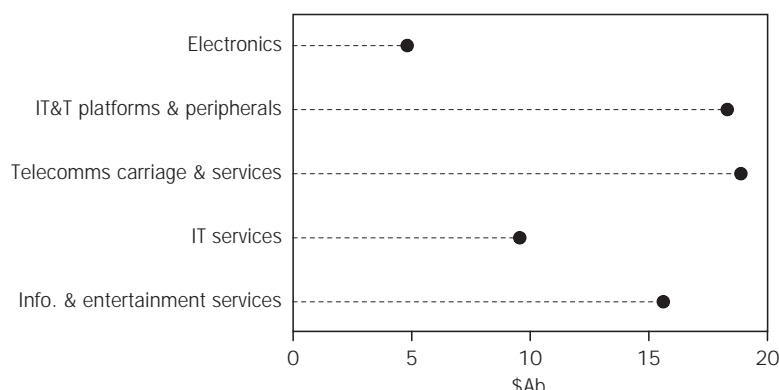
- as *embedded* ITECs—industrial and consumer products with electronic and information systems embedded within them (e.g.. cars and household appliances);
- *ITEC into everything*—systems (such as multimedia systems) that will become pervasive;
- *Information Businesses*—new kinds of businesses based on providing new kinds of electronic information products and services delivered over communications (e.g.. home shopping, tele-healthcare, etc.);
- *Infrastructure Systems and Services*—enabling the development and operation of the other three areas.

Australia's information industries

Australia's information industries have followed the dynamic pattern of international markets. A study conducted in 1996 into the Australian information industries estimated that their market (market being defined as "those that are now exposed to the digital convergence phenomenon") revenues were worth over \$65 billion in 1995, or approximately 7.5% of economy-wide revenues. This study also found that the industries grew at an average of 13% in the preceding year. (6)

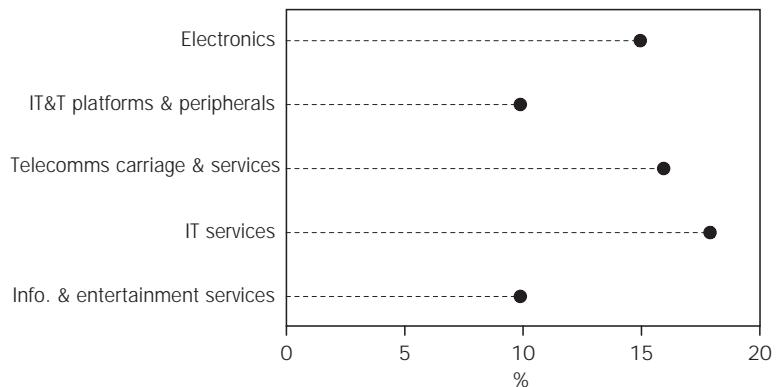
In terms of employment and export performance the industries are equally significant to the Australian economy as they employed 500,000 workers and had exports valued in excess of \$4 billion. (7)

AUSTRALIA'S INFORMATION INDUSTRIES—MARKET REVENUE, 1995–96



Source: Charles, Allen & Buckeridge (1997), *Spectator or Serious Player—Competitiveness of Australia's Information Industries*, p. 9.

AUSTRALIA'S INFORMATION INDUSTRIES—RATE OF REVENUE GROWTH, 1995–96



Source: Charles, Allen & Buckeridge (1997), *op. cit.* p.9.

Photo:

Woman at Information Machine

Delete keylines

Australia in the information age

Australia is well placed to participate in and take advantage of the opportunities offered by the development of the global information industries due to its relative strengths, both global and regional, which were identified below by the Information Policy Advisory Council (who provides advice to the Commonwealth Government's National Office of the Information Economy): (8)

- . secure legal and institutional structures, and relatively low levels of intellectual property piracy;
- . cable roll out and advanced networks;

- rapid technology uptake and a sophisticated consumer market;
- proximity to Asia;
- time zone positioning (for East:West services and activity handovers);
- sophisticated communications;
- english language, augmented by multilingual diversity;
- educated workforce;
- attractive lifestyle and environment;
- culture of creativity.

A number of these factors will be critically important for the development of the information society:

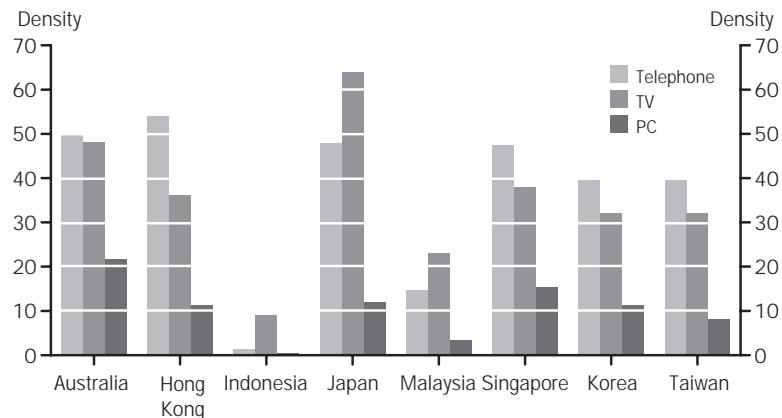
Sophisticated and competitive telecommunications:

- near ubiquitous telephone penetration and high digitisation of main telephone lines that is comparable with the world's major economies (9);
- a telecommunications industry that has no barriers to market entry;
- Australian telecommunications costs—particularly international and domestic calls—are internationally competitive (10);
- a broadband network passing nearly 2.5 million Australian homes that will be capable of delivering advanced interactive multimedia services. (11)

Australia's developments in the information age

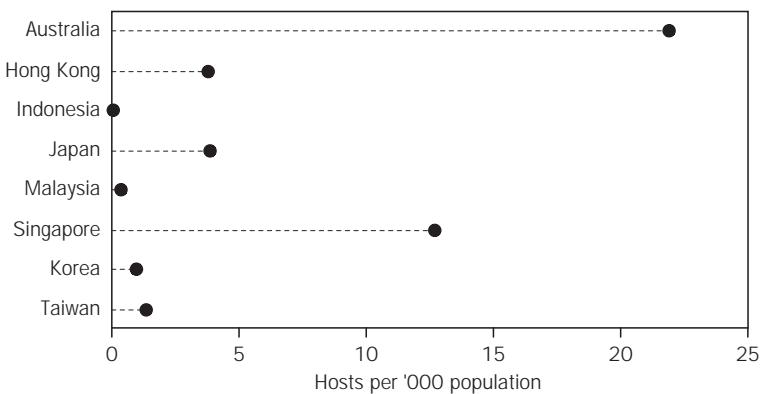
Australia ranks 10th highest in the world with regard to Telephone, PC and TV density and is well in advance of its regional competitors.

HOUSEHOLD DENSITY OF MULTIMEDIA ACCESS FACILITIES, 1994



Source: Charles, Allen & Buckeridge, *op.cit.*, p.19.

HOUSEHOLD INTERNET ACCESS, JULY 1996

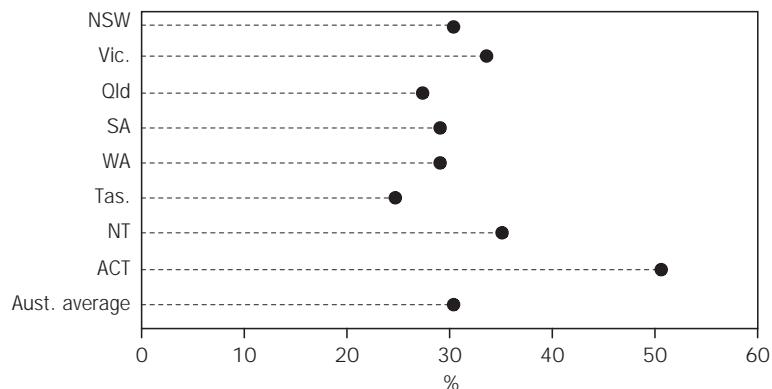


Source: Charles, Allen & Buckeridge, *op.cit.*

Australia has the fifth highest penetration of cellular mobile telephones in the world; (12)

In 1996, 30% of Australian households frequently used computers. (13)

SHARE OF HOUSEHOLDS FREQUENTLY USING COMPUTERS, BY STATE AND TERRITORY, FEBRUARY 1996



Source: ABS (1997), *Household Use of Information Technology, Australia* (Cat. no. 8146.0).

**MULTIMEDIA
VICTORIA**

The Victorian Government established Multimedia Victoria to provide leadership, facilitate growth and provide other supports for the development of the Victorian information industries.

Multimedia Victoria's origins can be traced back to 1995 when the Premier's Task Force on Communications and Multimedia was established with the specific purpose of providing a forum for high-level government and business consideration of multimedia and telecommunications. This Task Force, chaired by the Premier of Victoria, the Hon. Jeff Kennett MLA, draws its membership from approximately 40 key industry representatives at Chief Executive Officer level, academia, community representatives and three senior Ministers.

The secretariat to the Task Force, and the Government's vision for this industry was originally established within the Department of Premier and Cabinet. The multimedia portfolio was created in 1996—and with it, *Multimedia Victoria*. Since its inception the Multimedia portfolio has been held by the Hon. Alan Stockdale MLA. Minister Stockdale is also the State's Treasurer. The key purpose of Multimedia Victoria is the implementation of the Government's policy for the Victorian information industries—*Victoria 21*.

Victoria 21

The *Victoria 21* policy is being implemented through a range of projects—see diagram on the next page. Broadly speaking these policies address the development of the information infrastructure; Government use of ICTs; community use of ICTs and skills development; information industry development; and content development. The Victorian Government has focused on seven main areas of activity.

Victoria 21 Policy

VISION

Victorian firms will carve out a major role in the global provision of multimedia products and services, and the Government will use the power of communications technology and multimedia to transform the way it provides services to and communicates with the public.

OBJECTIVE 1

Citizen, government and business applications of multimedia communications and information services in Victoria will surpass international benchmarks.

OBJECTIVE 2

Wealth and jobs created by Victoria's computing, multimedia and communications industries will demonstrate sustained growth.

OBJECTIVE 3

Victoria is recognised as a centre of excellence in the global information economy by 2001.

GOVERNMENT A BEST PRACTICE USER OF ICTs

- . Government business process re-engineering

TAKE GOVERNMENT ON-LINE BY 2001

- . Electronic Service Delivery Service channel groupings such as: citizens channel, business channel, land channel.
- Life events groupings such as changing address, turning 18.

STRATEGIES

& POLICIES

GLOBAL CENTRE FOR THE INFORMATION INDUSTRIES

- Investment attractions & export facilitation
- . Multimedia 21 Fund
- . Interact '97
- . Support for International trade fairs

LEAD VICTORIA'S TRANSITION TO AN INFORMATION ECONOMY

- . VICNET
- . Skills.net
- . VicOne
- . WebSpinners
- . Electronic Business Network

DEVELOPMENTS IN VICTORIA

Promoting the growth of the information industries through investment

The Victorian economy has benefited from the dynamic growth of the global information industries and from the new opportunities of the information age. Recent new investments have been made across the spectrum of the information industries, reflecting both their changing industry structures and globalisation. For example:

- data processing services—IBM has set up an Asia Pacific data processing venture in Ballarat to service 23 Asian countries;
- help desk facilities—Oracle has established a 340 person Asia Pacific support centre to provide help desk facilities for 27 countries in the region;
- mirror sites—DEC has established its Asia Pacific "Alta Vista Mirror" site in Melbourne in a joint venture with a local company and Netscape has established in Melbourne the first Netscape mirror site outside the US along with its Australasian Head Office;
- mobile telephony—Ericsson has established its Asia Pacific mobile telephone repair facility for the region in Melbourne;
- Java programming language—Sun Microsystems has established a Java Centre of Excellence in Melbourne, with its Asia Pacific site to be located at the Interactive Information Institute at RMIT;
- interactive kiosk applications—Olivetti has established its multimedia development centre for interactive kiosk applications in Melbourne.

In value, total investments of \$1.2 billion have been made between 1995-97 creating 6,900 new jobs. (14)

Promoting the development of a multimedia skilled community

While Australian Internet take up rates are relatively high, the development of the information society will depend on widespread community business and acceptance. A number of State Government-led initiatives are assisting the development of community access to and awareness of the potential offered by multimedia communications—as a means of publishing locally-based information and forming communities of interest.

VICNET (www.vicnet.net.au)—a project of the State Library of Victoria—is an electronic networking infrastructure established on the state's base of public libraries. It maintains a World Web Site that generates over a million "hits" a week, provides affordable access to networked information, and a focus point for government and community groups to publish their own information on the Internet.

Complementing *VICNET* are a number of programs to build community skills and familiarity with networked information. Each year 6,000 teachers receive training in new information and communications technologies. *Skills.net* (www.skills.net.au) provides funding to local community proposals that provide skills development and fulfil community needs. This will provide Internet skills to more than 40,000 Victorians over the next three years. *Webspinners*—(www.webspinners.net.au)—is a structured training and work experience program for young people aged 16-19 years that provides participants with the basic skills required for entry level employment in the multimedia industry.

Fostering the development of a vibrant communications industry

The evolving information industries are typically collaborative in nature. For example, multimedia content and applications are produced by firms that bring together the skills of many diverse industries; and new technologies are often the product of research and development performed by firms and academic institutions in strategic alliances.

A number of collaborative institutions for the information institutions have been established in Victoria. Amongst these are *EMERGE*—(www.EMERGE.com.au)—one of the six cooperative multimedia centres established by the Commonwealth Government. *EMERGE* brings together the multimedia expertise of four universities and four private companies, and acts as a catalyst for training, research and development, industry intelligence and networking. *Melbourne IT* promotes the commercialisation of Melbourne University's IT&T and multimedia research and expertise, in partnership with Ericsson and Ilog. The *Interactive Information Institute* at the Royal Melbourne Institute of Technology is a centre for the development of creative and broad ranging ICT applications also conducted in partnership with industry to assist commercialisation. The Greenhills Enterprise Centre in Ballarat conducts 'investment ready' programs and an incubator program to support growing information industry firms.

Extending Victoria's role as a creative centre for the development of multimedia content

Multimedia is changing the production processes and nature of the visual arts enabling the transformation of the states' film and television industries. For example, the use of computers spans virtually every phase of film production including script writing, budget planning, set design and pre visualisation of live action set up, and post production. Telecommunications developments have enabled relatively high resolution images to be transmitted between two locations including international destinations demonstrating the possibilities and increased opportunities for Australian post production houses.

Cinemedia is one of the five core cultural institutions of the State of Victoria and is charged with significant community service obligations embracing these new opportunities. *Cinemedia* aims to provide the people of Victoria with appropriate access to the art form of the moving image and to achieve this end works to support, develop and promote the film and multimedia industries in Victoria. *Cinemedia* administers the *Multimedia 21 Fund* which provides funding for the development of commercial and educational applications by the Victorian multimedia industry ranging from software to assist air traffic controller training to projects for on-line tourism and travel businesses incorporating on-line transaction capabilities. *Cinemedia* has also undertaken a Digital Media Library trial, digitising content which can be delivered on demand over a broadband network.

Promoting industry use of electronic commerce

Currently estimated to be valued at around US\$3 billion per year, electronic commerce is still in early stages of development. However estimates of its future size and importance are staggering—estimates of the potential global value of Internet transactions by 2000 lie in the range of US\$100 billion to US\$150 billion per year. (15). Developing business awareness of the opportunities for re-engineering companies and reaching wider consumer markets will be a key factor determining whether this growth is achieved.

Established with State, Federal and private sector funding the Australian Electronic Business Network (AEBN) is headquartered in Melbourne. The AEBN is a national electronic commerce resource facility aimed at accelerating the uptake of electronic commerce by small to medium-sized businesses through demonstrating business benefits.

A number of industry-based initiatives are also underway in Victoria, specifically in the pharmaceutical, clothing and textile and agriculture sectors which have been the focus of trials to demonstrate potential efficiencies and opportunities of electronic networking and transactions.

Improving the quality, efficiency and effectiveness of government through the use of multimedia and communications applications

Governments are significant users of ICTs. The development and deployment of ICTs has therefore presented Government with significant opportunities to improve the way it communicates both with itself and with the public.

Currently Victorian Government networks simply link a government site with a central computer site in a departments headquarters. To take advantage of opportunities presented by ICT developments the Victorian Government has contracted with AAPT Networks to build, own and operate a wide area network that establishes a single data network connecting Victorian Government sites—more than 3100 in all. The network—*VicOne* (www.net.aapt.com.au/vicone)—is the first high capacity network of its kind in Australia. VicOne's advanced data network will offer a standard operating environment across government, and its broadband capability will enable a rapid exchange of data, seamless interaction between computer systems, and the opportunity to use the latest technology tools such as video conferencing and telemedicine links. All Victorian Government schools are scheduled to be connected to *VicOne* by June 1998—allowing efficient sharing of specialist teaching, administration and the linking of schools, Universities and TAFEs.

Government goes on-line

The Victorian Government has begun the process of making all of its information and services available through on-line channels by the year 2001.

The Government has initiated extensive web sites (www.vic.gov.au) and has dramatically improved public access to legislative information (www.vicnet.net.au/vicnet/vicgov/parl/hans.html), making democratic processes accessible in a way that has never before been possible.

In a world first (16), the Victorian Government in partnership with the private sector has developed an integrated *electronic service delivery* infrastructure—known as *maxi* (www.maxi.com.au and by phone 132723), which was launched in late 1997. Currently it provides access to a range of organisations across the state, such as Yarra Valley Water, Eastern Energy, local councils, Vic Roads and the Registry of Births, Deaths and Marriages. When fully developed *maxi* will give Victorian citizens and businesses access to many government services at Commonwealth, State and local levels, and business services, including utilities, through a single access point.

Maxi is a world first for a number of reasons: it is the first multimedia system that:

- allows the same content to be delivered over three different channels—kiosks, the Internet and interactive voice response telephony;
- is designed around the concept of "life events"—consumers only require to know the service they want to access, not the particular government agency;
- addresses the issue of digital signatures and is designed to accept a smart card or disc to input a personal signature on a document;
- combines government with business services.

The future

The information society will have the ability to access immense quantities of information and entertainment on demand, to interact with and manipulate large quantities of data, to transact remotely and to communicate while on the move. It is a vision of ubiquitous communications infrastructure, greater productive efficiencies and service delivery, enhanced personal choice and new possibilities for the way communities of interest relate to each other.

The emerging information economy is truly global; time and distance are less important barriers to communication—and it is all-embracing; all sectors and activities of society, polity and the economy will feel its affects.

For Australia a distant, sparsely populated country, there are dramatic improvements in the opportunities for engagement with the rest of the world and for intra-regional communication. Social interaction, community development, and opportunities for political participation will undergo significant change.

Photo:

Ericsson

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Around the world Government has been identified as a key player in the development of the information society—as leaders and exemplars, and as owners and providers of infrastructure, services and content. Multimedia Victoria's aim is to lead Victoria's transition to an information economy—to promote the development of Victoria's information industries and support the use of new information and communication technologies by citizens, government and business.

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Chapter 1

Victoria in Perspective

Photo:

City from Williamstown

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ECONOMIC TRENDS IN VICTORIA

The following article has been provided by the Department of Treasury and Finance, Victoria.

Overview

The Victorian economy has experienced a prolonged expansion following the recession of the early 1990s. The recovery has been characterised by:

- Per capita growth rates in excess of the national average, reflecting a comparatively strong labour productivity performance.
- A progressive reduction in population losses to other States, which peaked at almost 32,000 in 1993–94 but had declined to just over 8,000 in 1996–97.
- A shift in resources away from the public sector towards private enterprises. Public sector wage and salary earner employment has declined by 26% or 119,800 from its peak in 1988–89 to the year ending March quarter 1997. Three out of every four of these jobs were in the State Government sector, reflecting in part the privatisation of government enterprises. These losses were more than offset by an additional 211,800 private sector jobs over the same period.
- An expansion in the relative importance of commercial services with growth having been particularly strong in such areas as computer services, marketing, employment placement and tourism-related activities such as food retailing, hospitality and cultural and recreational services. Over the same period Victoria has become less reliant on manufacturing.
- A sustained increase in private business fixed investment from 7.6% of gross state product (GSP) in 1991–92 to 11.9% of GSP in 1996–97.

Economic Trends

1.1 TRENDS IN ACTIVITY – VICTORIA(a)

	1995–96(b)	1996–97(b)
Expenditure & output(c)		
Final consumption expenditure		
Private	3.5	3.0
Government	1.7	0.7
Gross fixed capital expenditure(d)		
Private		
Dwellings	-10.4	7.4
Non-dwelling construction	44.9	40.5
Equipment	20.9	29.2
Total business investment	26.6	32.3
Total private	12.6	23.9
Public	-16.9	-27.1
State final demand	3.7	5.2
International trade in goods		
Exports	20.3	6.7
Imports	3.0	10.6
Gross state product (GSP)	3.9	2.1
Employment & inflation		
Employment	2.6	1.2
Unemployment rate (end of period)	8.2	9.4
Consumer Price Index, Melbourne	3.8	1.3

(a) Percentage change from previous period unless otherwise indicated. (b) Original data except for the unemployment rate (seasonally adjusted). (c) Constant prices. (d) Private & public investment have been affected in recent years by privatisations.

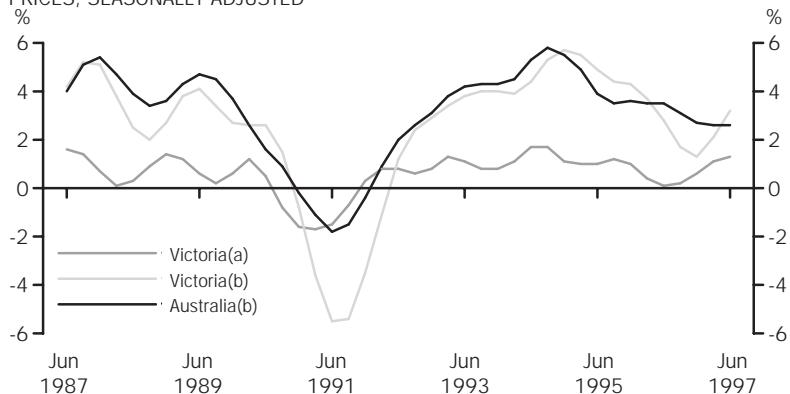
Source: Australian National Accounts: State Accounts (Cat. no. 5242.0), Labour Force, Australia, Preliminary (Cat. no. 6202.0), Consumer Price Index (Cat. no. 6401.0).

Following a slowing in Victorian economic growth during 1996, in line with the nation as a whole, activity began to accelerate in the first half of 1997 in response to strengthening demand.

The slowing in 1996 was also reflected in the Victorian labour market with growth in State employment slowing in 1996–97. Part-time jobs growth outweighed full-time employment losses. The trend Victorian unemployment rate remained between 9.0% and 9.2% for most of 1996–97. However, the September 1997 labour force data showed an encouraging improvement in employment prospects, with Victorian trend employment rising for the first time since January and the unemployment rate declining slightly.

In terms of major expenditure items, net exports, inventory investment and the statistical discrepancy, rather than State final demand, were mainly responsible for the slowdown. Victorian private business fixed investment continued to recover strongly during 1996–97, even after adjusting for the distorting effects of privatisations and major asset sales. Private consumer spending also held up well, although growth in retail turnover eased in the first half of 1997.

PERCENTAGE CHANGE IN GROSS DOMESTIC AND STATE PRODUCT AT CONSTANT PRICES, SEASONALLY ADJUSTED



(a) Change from previous quarter. (b) Change from same period last year.

Consumer spending

Victorian private final consumption increased by 3.5% through the course of 1996–97, the second fastest rate in Australia and well above the national average of 2.2% over the same period. Retail trade grew more rapidly in 1996–97 in Victoria than in any other State or Territory, with growth in household goods and food retailing being particularly high. Victorian new motor vehicle registrations increased strongly in late 1996 and early 1997 in response to a decline in vehicle prices.

Housing sector

The Victorian housing construction cycle began to turn up in late 1996 when commencements bottomed at just over 5,400 dwelling units. Historically high levels of housing affordability (reflecting reductions in mortgage interest rates and rising household incomes) and an emerging excess demand for housing in Victoria (in contrast to many other parts of Australia) helped push commencements to over 6,800 per quarter in the first half of 1997 (still well below the last quarterly peak of over 8,700 units in early 1994). Private dwelling investment grew by 19.1% and finance commitments rose steadily during the course of 1996–97. Auction clearance rates are at their highest level since early 1989 and Melbourne house prices are rising faster than the national average. The Melbourne rental market also remains tight, with the vacancy rate at just 2% and rents rising steadily in most locations.

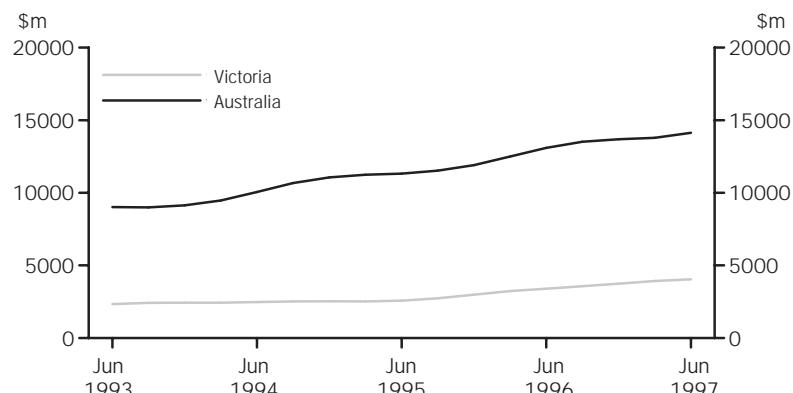
Business investment

In 1996-97 Victoria accounted for 29% of national private business investment (includes major sales from the public sector), above its population share of 25% and GSP share of 26%. Victorian private business investment at present is spread widely across hotels, shops, offices and factories. Business investment has been boosted in recent quarters by the completion of the Crown Entertainment Complex.

The value of non-residential building commencements has been trending upwards, work remaining to be completed on existing projects (\$705 million at end March quarter 1997 in current prices) exceeds the value immediately before the start of the Crown Entertainment Complex. Engineering construction is likely to be supported by the City Link project over the next few years.

Among a number of new projects in the pipeline work on the first stage of the \$2 billion-plus Docklands project – the Docklands Stadium – has commenced. Toyota has also recently announced plans to upgrade its Altona plant to produce the new six-cylinder Avalon motor car, involving up to \$1 billion over the next seven years.

PRIVATE BUSINESS FIXED INVESTMENT – VICTORIA AND AUSTRALIA



Source: Australian National Accounts: National Income, Expenditure and Product (Cat. no. 5206.0). Australian National Accounts: State Accounts (Cat. no. 5242.0).

Labour market

Victorian and national labour market conditions were subdued during 1996-97, although there were some encouraging signs in September 1997.

The services sector has continued its role as the main generator of new jobs in Victoria, accounting for all of the growth in employment over the 1996-97 year. Employment in the fourteen service industries rose by 0.9% (15,000 persons) over the year to August 1997, with strongest growth in property and business services and finance and insurance. In contrast the manufacturing sector reduced its workforce by 5.8% (21,000 persons) over the same period and lower employment was also recorded in the mining and agricultural sectors.

Metropolitan Melbourne unemployment rates are highest in the Outer-Western, North-Western and Mornington Peninsula regions. Unemployment rates are lowest in the eastern and southern suburbs, reflecting rises in employment in the services sector. In country Victoria unemployment rates remain highest in Gippsland and the Barwon-Western District region. The strongest labour market in country Victoria is the Goulburn-Ovens-Murray region where employment growth has been underpinned by the strength of local food production and processing.

Manufacturing

Manufacturing accounts for nearly one-fifth of total production in the Victorian economy – a larger share than in any other State. Victorian respondents to the ABS Australian Business Expectations Survey forecast a rise in manufacturing sales in late 1997, with demand being partly met through further destocking. Increased capital expenditure is also expected, despite current low levels of capacity utilisation. According to the Australian Chamber of Manufactures' Survey of Australian Manufacturing most manufacturing industries are expecting a rise in sales in the short term, with the food, beverages and tobacco industry forecasting the strongest improvement.

Farm sector

According to the Australian Bureau of Agriculture and Resource Economics (ABARE) Victoria experienced a cold and dry crop growing season in 1996–97, with the driest areas in the north western part of the Mallee region. ABARE has significantly revised downward forecasts of State crop yields for 1997–98 with wheat, barley, oats and pulse production expected to be well below average. Dairy industries are also suffering from the impact of dry weather with farmers in the Gippsland region worst affected. With the probability of below average seasonal conditions in 1997–98 livestock slaughterings are expected to remain high.

Inflation and wages

The Melbourne headline consumer price index (CPI) increased by just 0.6% over 1996–97, the lowest annual rise in 4½ years. Nationally, headline CPI recorded its first quarter of deflation in five years to be 0.3% higher than a year earlier. Lower interest rates, intense competition in product markets and an appreciating exchange rate helped restrain inflation during 1996–97.

Victorian average weekly ordinary time earnings (AWOTE) grew by 4.1%. Nationally, public sector AWOTE growth continues to outstrip private sector wages growth. However, this is substantially explained by recent restructuring in the Commonwealth public sector which has concentrated job losses among lower paid employees and raised 'average' earnings in the sector independently of movements in wage rates. Enterprise bargaining data suggest that new federal agreements in the public sector are yielding similar wage rises to those in the private sector.

Photo:

Hattah National Park

Delete keylines

CHRONOLOGY OF EVENTS, 1997**January**

1 The Legal Practice Act improving the regulation of legal practice and the legal profession came into force in Victoria.

21 3 people died and 41 houses were destroyed in bush fires which ravaged the Ferny Creek, Tremont and Upwey areas of the Dandenong Ranges.

26 Martina Hingis from Switzerland and Pete Sampras from the US won the singles finals in the 1997 Australian Open Tennis Championships.

26 An outbreak of anthrax was discovered on two properties near Shepparton initiating a large scale campaign in the district to contain the infection.

February

1 Independent candidate Susan Davies won the by-election for the seat of West Gippsland with a 13% swing against the Kennett Government.

9 Kirstie Marshall won a gold medal in the aerial section at the World Freestyle championships in Nagano in Japan.

March

1 Luciano Pavarotti, Placido Domingo and Jose Carreras (The Three Tenors) performed at the MCG before a crowd of more than 50,000.

9 David Coulthard (UK) won the Australian Formula One Grand Prix in his McLaren Mercedes Benz.

15 Local government elections took place across Victoria in 55 Municipalities for the first time since the amalgamations and boundary changes of 1994.

21 Two people died and many were reported ill from salmonella poisoning from eating contaminated smallgoods in Melbourne, with other incidents of food poisoning in the following weeks.

24 The State Treasurer, Alan Stockdale, announced plans for the breakup of the Gas and Fuel Corporation of Victoria (GASCOR) into six new companies.

31 David Millard of Adelaide, great grandson of the first winner in 1878, was the winner of the Stawell Gift.

Photo:

Moomba, Girls waterskiing

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April

12 Sir Eric Herbert Pearce, radio and television announcer, news reader and community leader, died at the age of 92.

17 The State Minister for Transport, Robin Cooper, announced that the States public transport system would be completely privatised by the end of 1998.

22 Loy Yang Power Station A in Gippsland was sold to the US based CMS Energy for \$4.855 billion, Australia's largest privatisation deal to this time.

24 Sir James Gobbo took over as the 25th Governor of Victoria

May

7 The long term leasehold for Tullamarine Airport was finalised with the Australia Pacific Airports Corporation (a consortium formed by the AMP, the British Airports Authority (BAA and Axiom Funds Management) for \$1.3 billion.

8 The new \$1.8 billion Crown Casino complex was opened on Southbank with great spectacle.

14 Professor Adrienne Clarke, former chief of the CSIRO, was appointed Lieutenant Governor of Victoria.

26-28 The Reconciliation Convention was held in Melbourne with representative of Aboriginal and Torres Strait Islander organisations and communities, and relevant non-indigenous groups, celebrating the 30th anniversary of the referendum which ensured that Indigenous Australians would be counted in the census.

27 Mrs Brigitte Muir, 39, from Natimuk, became the first Australian woman to succeed in climbing Mount Everest.

30 The State Government announced the sale of Melbourne Port Services to Skilled Engineering for \$7.7 billion.

June

3 Fiona Hall from Adelaide won the inaugural \$100,000 biennial Contempora5 visual art prize.

14 William Henry (Bill) Collins, race caller and radio and television personality died aged 69 years.

15 The disappearance of 14 month old Jaidyn Leskie from the home of his mother's boyfriend in Newborough in Gippsland led to the biggest police man-hunt held in Victoria since the disappearance of the former Prime Minister Harold Holt in 1967.

July

7 Sir John Angus Nimmo, barrister and Federal Court judge, died at Mt Eliza aged 88.

13 The Museum of Victoria was closed at its Swanston Street address to be re-opened in its new buildings in Carlton in 2000.

24 The Premier, Jeff Kennett, opened the new \$65 million Sports and Aquatic Centre at Albert Park in Melbourne.

30 A rally of some 5,000 people in Melbourne protested against the proposed tariff cuts in the textiles, clothing and footwear industries, with a similar rally in Geelong on 6 August.

August

6 Nurses reinstated their bans, closing 20% of beds in the hospitals over unresolved issues concerned with their pay and work conditions. The bans were lifted on 26 August following their acceptance of an 11% pay rise over 3 years and additional staffing.

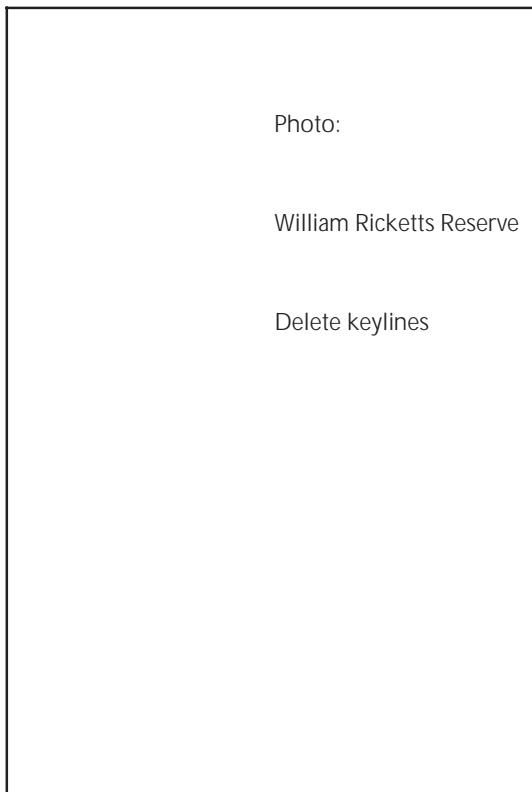


Photo:

William Ricketts Reserve

Delete keylines

September

16 The Spring Session of Parliament was opened with a petition of some 20,000 signatures presented against the Government's proposed legislation to amend the Audit Act to change the role of the Auditor General.

22 Robert Harvey, St Kilda Football Club, secured the 1997 Brownlow Medal.

27 The Adelaide Crows (19-11) defeated St Kilda (13-16) in the AFL Grand Final at the Melbourne Cricket Ground.

October

1 The national ban on automatic and semi-automatic high powered guns came into effect and the national buy-back scheme came to an end. As at 25 September 1997, in Victoria, 199,279 prohibited firearms were surrendered for a total value of \$97,925,853.

5 Alex Criville (Spain) won the Australian 500cc motorcycle Grand Prix at the Philip Island racecourse.

7 The Victorian Government announced changes to the State workers' compensation scheme, WorkCover, which abolished the rights of injured workers to sue their employers.

11 The Victorian State high voltage electrical grid system, PowerNet Victoria, was sold for \$2.7 Billion to the US based General Public Utilities.

12 The controversial Serrano photographic exhibition at the National Gallery of Victoria was closed following the attempted theft and later attack on the photograph 'Piss Christ'.

17 The State Coroner, Graeme Johnstone, found the State Government was to blame in the deaths of nine intellectually disabled men at the Kew Cottages in April 1996.

November

4 The 1997 Melbourne Cup winner was Might and Power, Caulfield Cup winner on 18 October, the tenth occasion of a Caulfield and Melbourne cup double.

28 Pentridge Prison was formally closed as the last prisoners there were removed to the new privately run prison at Laverton.

December

10 The Audit Act Amendment Act was passed in the Victorian Upper House after a 3.5 hour debate.

11 Mirvac won the right to build the Yarra Waters precinct in the Dockland Project in Melbourne.

13 The by election for the seat of Mitcham saw a 16% swing against the Liberals with the seat going to Labor.

Chapter 2

Climate and Natural Environment

Photo:

Ninety mile beach

Delete keylines

OVERVIEW

This chapter contains information about Victoria's natural environment and climate. It includes contributions from Parks Victoria, the Bureau of Meteorology and the Environment Protection Authority.

Physical features

Although Victoria is the second most populous State or Territory in the country, it is ranked sixth in terms of geographic size and accounts for only 3% of Australia's total area.

2.1 AREA OF STATES AND TERRITORIES

State or Territory	Area in square kilometres	Length of coastline in kilometres	Percentage of total area	Percentage of total population (as at 1995)
Western Australia	2 525 500	12 500	32.88	9.6
Queensland	1 727 200	7 400	22.48	18.8
Northern Territory	1 346 200	6 200	17.52	1.1
South Australia	984 000	3 700	12.81	8.0
New South Wales	801 600	1 900	10.44	33.8
Victoria	227 600	1 800	2.96	24.4
Tasmania	67 800	3 200	0.88	2.6
Australian Capital Territory	2 400	(a) 35	0.03	1.7
Australia	7 682 300	36 735	100.00	100.0

(a) Jervis Bay Territory.

Source: Bureau of Meteorology; ABS unpublished data.

Location

Wilson's Promontory, latitude 39° 08' S, longitude 146° 22' 30" E, is the southernmost point of the mainland of Victoria and similarly of the mainland of Australia; the northernmost point is where the western boundary of the State meets the Murray River, latitude 33° 59' S, longitude 140° 58' E; the point furthest east is Cape Howe, situated in latitude 37° 31' S, longitude 149° 58' E. The westerly boundary lies upon the meridian 140° 58' E and extends from latitude 33° 59' S to latitude 38° 04' S, a distance of 451 kilometres.

Coastline

The Victorian coastline comprises many types of environments. Broad sandy beaches and impressive cliffs contrast with mangrove-fringed mudflats. Cliffs and beaches occur mostly in areas that receive the main impact from waves generated by the dominant winds from the south-west: for example the ocean coast and north-eastern coast of Port Phillip Bay. In the large embayments – Port Phillip Bay, Western Port Bay and Corner Inlet – and in some estuaries, waters are more protected from the wind and the ocean swells; here, tidal flats of sand or mud, traversed by sinuous channels, may be colonised by salt-tolerant plant communities such as mangroves.

Physiographic divisions

Jenkin and Rowan have classified Victoria's landforms into six main regions.

1. Central Victorian Uplands
2. South Victorian Uplands
3. The Murray Basin Plains
4. West Victorian Volcanic Plains
5. South Victorian Coast
6. South Victorian Riverine Plains

A more detailed description of these regions can be found on page 23 of the 1997 issue of the *Victorian Year Book*.

Other features

Victoria's highest mountain is Mt Bogong, located in the West Victorian Uplands. The longest river is the Goulburn, which runs from Lake Eildon to the Murray east of Echuca. The Goulburn is also the river with the greatest annual flow of water. (The Murray river flows in NSW, as the State boundary is the south bank of the river.) Other important physical features are shown in Table 2.2.

2.2 SELECTED PHYSICAL FEATURES, VICTORIA

Mountain	Height metres	River	Length km
Bogong	1 986	Goulburn	566
Feathertop	1 922	Glenelg	457
Nelse North	1 883	Loddon	381
Fainter South	1 877	Mitta Mitta	286
Loch	1 874	Hopkins	281

Climate

The major topographical determinant of Victoria's climate is the Great Dividing Range, running east-west across the State, and rising to approximately 2,000 metres in the eastern half. This acts as a barrier to the moist south-east and south-west winds and together with its proximity to the coast, causes the south of the State to receive more rain than the north.

To the south of Victoria, except for Tasmania and its islands, there is no land for 3,000 kilometres. This vast area of ocean has a moderating influence on Victoria's climate in winter. Snow, which is a common winter occurrence at similar latitudes on the eastern seaboard of the great land masses of the northern hemisphere, is rare in Victoria below elevations of 600 metres. To the north of Victoria, the land mass of Australia becomes very hot in the summer, and on several days at this time of year the temperature over the State may rise to between 35°C and 40°C, often with a strong northerly wind.

Across Victoria, the average number of days of rain (0.2mm or more in 24 hours) in a year varies considerably. In the Otway Ranges there are over 200 days of rain, compared with an average of 100 wet days a year experienced in regions approximately 160 kilometres inland from the coast. Average rainfall ranges from 250mm for the driest parts of the Mallee to 2,600mm at Falls Creek in the Alps. The distribution of rainfall in Victoria by districts is shown in Table 2.3.

2.3 RAINFALL IN DISTRICTS, VICTORIA

District	Year						Average (a) mm
	1991 mm	1992 mm	1993 mm	1994 mm	1995 mm	1996 mm	
North Mallee	300	475	364	178	348	293	309
South Mallee	319	564	412	184	373	388	355
North Wimmera	408	567	440	222	431	433	412
South Wimmera	562	763	558	355	510	581	507
Lower North	401	625	531	268	427	361	434
Upper North	500	704	648	306	570	552	517
Lower Northeast	794	1 129	1 092	610	1 065	1 042	785
Upper Northeast	1 334	1 117	1 514	940	1 245	1 442	1 111
East Gippsland	782	1 049	681	724	890	779	780
West Gippsland	1 033	972	1 055	864	952	908	917
East Central	1 061	1 171	1 111	764	969	1 093	895
West Central	634	811	718	454	752	683	615
North Central	803	1 030	910	496	750	851	731
Western Plains	642	866	707	493	642	635	632
West Coast	955	1 043	797	742	830	877	780
Melbourne Suburban	833	909	900	537	870	809	n.a.

(a) Average for 83 years 1913 to 1995.

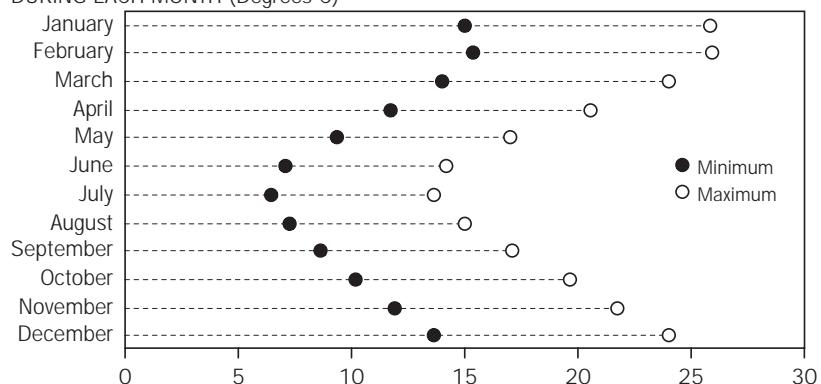
Source: Bureau of Meteorology.

Melbourne's weather

Melbourne's climate is temperate and variable, and moderate rainfall is received in most months. In summer, daytime temperatures average in the mid to high 20s. In autumn and spring, daytime temperatures average near 20°C, while in winter, temperatures average in the low to mid teens.

Situated about 60 kilometres from the open ocean, the city has a climate midway between maritime and continental, although the extensive landlocked Port Phillip Bay has a moderating effect on temperatures in bayside areas. To illustrate, the bayside suburb of Black Rock has an average summer maximum temperature of 24.3°C. By contrast, the outer northeastern suburb of Watsonia has an average summer maximum of 26.1°C.

AVERAGE MONTHLY MINIMUM AND MAXIMUM TEMPERATURE IN MELBOURNE DURING EACH MONTH (Degrees C)



Source: Bureau of Meteorology

2.4 TEMPERATURE AND SUNSHINE

Month	Air temperature daily readings (°C)			Extreme air temperature (°C)			Extreme temperature (°C)			Mean daily hours sunshine
	Mean max.	Mean min.	Mean	Highest max.	Date(c)	Lowest min.	Date(c)	Lowest terrestrial min.	Date(c)	
Number of years of record	30	30	30	142	—	142	—	137	—	(a)85
January	25.9	15.1	20.5	45.6	13/39	5.6	*28/85	-1.0	*28/85	8.1
February	26.0	15.5	20.7	43.2	8/83	4.6	24/24	-0.6	*6/91	7.5
March	24.1	14.1	19.1	41.7	11/40	2.8	*17/84	-1.7	(b)	6.2
April	20.6	11.8	16.2	34.9	5/38	1.6	*24/88	-3.9	*23/97	4.9
May	17.1	9.5	13.3	28.7	7/05	-1.2	29/16	-6.1	26/16	3.8
June	14.3	7.2	10.7	22.4	2/57	-2.2	*11/66	-6.7	30/29	3.1
July	13.7	6.5	10.1	23.1	30/75	-2.8	*21/69	-6.4	12/03	3.5
August	15.1	7.4	11.3	26.5	29/82	-2.1	*11/63	-5.9	14/02	4.4
September	17.2	8.7	12.9	31.4	28/28	-0.6	3/40	-5.1	8/18	5.2
October	19.7	10.3	15.0	36.9	24/14	0.1	*3/71	-4.0	22/18	5.9
November	21.8	12.0	16.9	40.9	*27/94	2.4	*2/96	-4.1	*2/96	6.7
December	24.1	13.7	18.9	43.7	15/76	4.4	*4/70	0.7	1/04	7.4
Year										
Averages	20.0	11.0	15.5	..	..	..	..	..	..	5.6
Extremes	..	..	..	45.6	13/1/39	-6.7	30/6/29	-6.7	30/6/29	..

(a) Discontinued 1967. (b) 17/1884 and 20/1897. (c) Figures such as 13/39 indicate, in respect of the month of reference, the day and year of occurrence. Dates marked with an * indicate the nineteenth century.

Source: Bureau of Meteorology, Melbourne.

The hottest months in Melbourne are normally January and February, when the average maximum temperature is 26°C. The hottest day on record in Melbourne was 13 January 1939, when the temperature reached 45.6°C. In Melbourne, the average number of days per year with maximum temperatures over 30°C is approximately twenty-nine and the overnight temperature remains above 20°C on about four nights per year.

Nights are coldest at places a considerable distance from the sea, and away from the city where heat retention by buildings, roads, and pavements may maintain the air at a slightly higher temperature. This 'heat island' effect, which is the consequence of asphalt and concrete absorbing daytime warmth and radiating it back into the environment during the night, is largely confined to the Central Business District (CBD). In the CBD minimum temperatures are now mostly between 1°C and 2°C above those of most metropolitan locations.

The frequency of very low air temperatures varies widely across the Melbourne metropolitan area. For example, there are approximately ten annual occurrences of 2°C or less around the Bay, but the frequency increases to over twenty in the outer suburbs and to more than thirty a year in the more frost susceptible areas.

In Melbourne, rainfall is fairly evenly distributed throughout the year, averaging about 55mm per month with an annual average rainfall of 639mm, falling over 143 days. Spring is slightly wetter than other seasons. Although the total amount of rain received is about the same for winter and summer, it falls on twice as many days in winter than it does in summer.

2.5 HUMIDITY, RAINFALL AND FOG

Month	Relative humidity		Rainfall						Mean days of fog no.
	9 am mean %	3 pm mean %	Mean monthly mm	Mean days of rain no.	Greatest monthly(b) mm	Least monthly(b) mm	Greatest in one day mm	Date(b)	
Number of years of record	30	30	30	30	142	142	142	—	30
January	62	44	47.1	7.9	176 (1963)	(a) (1932)	108	29/63	0.0
February	65	45	45.8	6.8	238 (1972)	(a) (1965)	87	26/46	0.3
March	66	47	43.5	9.4	191 (1911)	4 (1934)	90	5/19	0.4
April	71	52	52.7	10.7	195 (1960)	Nil (1923)	80	23/60	1.1
May	77	59	67.8	14.5	142 (1942)	4 (1934)	51	15/74	1.7
June	81	63	42.5	13.2	117 (1990)	8 (1858)	44	22/04	2.3
July	79	61	48.8	14.8	178 (1891)	9 (1979)	74	*12/91	2.2
August	74	57	57.4	15.9	111 (1939)	12 (1903)	54	*17/81	1.2
September	67	52	53.0	14.0	201 (1916)	13 (1907)	59	23/16	0.8
October	63	50	65.2	13.9	193 (1869)	7 (1914)	61	21/53	0.5
November	63	47	56.9	11.8	206 (1954)	6 (1895)	73	21/54	0.9
December	62	45	58.1	10.4	182 (1863)	2 (1972)	100	4/54	0.2
Year									
Totals	..	..	638.8	143.3	..	..	..	..	11.1
Averages	69	52	..	..	..	..	..	..	..
Extremes	..	..	..	..	967 (1916)	332 (1967)	108	29/1/63	..

(a) Less than 1mm. (b) Bracketed figures indicate year of occurrence. Figures such as 29/63 indicate, in respect of the month of reference, the day and year of occurrence. Dates marked with an * relate to the nineteenth century.

Source: Bureau of Meteorology, Melbourne.

The eastern suburbs are significantly wetter than the western suburbs. For example, Scoresby has an average annual rainfall of 901mm, in contrast to Laverton's 569mm. The relatively low rainfall to the west of the city is due to a combination of the 'rain shadow' effects of the Otway Ranges and the ranges in the Ballarat region. The relatively high rainfall to the east of the city is due to moisture in the predominant westerly wind stream condensing as the stream approaches the foothills of the Dandenong Ranges.

Thunderstorms are more frequent during late spring and summer, when there is adequate surface heating to provide energy for convection, than at other times of the year. In February 1972, 78mm fell in one hour during a thunderstorm. Hail is observed more often during winter and spring.

The wind varies from day to night and from season to season. Wind speed is usually lowest during the night and early hours of the morning prior to sunrise. It increases during the course of the day as heating of the earth's surface induces turbulence in the wind stream. Examples of the daily variation are the sea breeze, which brings relief on many hot days, and the valley or katabatic breeze, which brings cold air from inland Victoria down valleys during the night and early morning towards Melbourne. These breezes are responsible for winds being more often from the north during winter, particularly during the morning and from the south during summer, particularly during the afternoon. There is a marked tendency for the strongest winds to occur during the late winter and early spring months.

Duststorms and tornados are rare. However, on February 8, 1983, a duststorm reduced visibility in the city to 100 metres.

2.6 BAROMETER, WIND, EVAPORATION, THUNDER, CLOUDY AND CLEAR DAYS(a)

Month	Wind (height of anemometer 28 m)									
	Mean of 9 am and 3 pm atmospheric pressure reduced to mean sea level hPa		Mean of 9 am and 3 pm wind speed km/h	Highest gust speed km/h	Prevailing direction		Mean amount evaporation mm	Mean days thunder no.	Mean cloudy days(b) no.	Mean clear days(c) no.
	9 am	3 pm			9 am	3 pm				
Number of years of record	30	30	88	30	30		(d)27	30	30	30
January	1 013.5	13.2	106	S	S		195	1.3	8.0	5.3
February	1 015.1	12.5	119	SE	S		167	1.2	6.9	5.7
March	1 017.4	11.9	106	N	S		133	1.3	9.4	5.3
April	1 019.5	11.1	108	N	S		87	0.4	11.2	3.9
May	1 019.8	11.5	116	N	N		53	0.4	13.5	2.5
June	1 020.3	11.7	103	N	N		36	0.0	12.6	2.2
July	1 018.9	13.5	109	N	N		40	0.3	12.2	2.4
August	1 017.5	14.1	108	N	N		59	0.5	12.9	1.9
September	1 016.9	15.2	121	N	S		81	0.7	10.9	2.8
October	1 015.7	15.0	111	N	S		121	1.3	11.9	2.9
November	1 014.5	14.3	114	W	S		144	1.5	11.4	2.7
December	1 012.9	14.1	104	SW	S		177	1.7	9.6	3.5
Year										
Totals	..	..	..	..	..		1 293	10.6	130.4	41.1
Averages	1 016.8	13.1	..	N	S		..	..	..	..
Extremes	..	..	121	..	..		..	..	..	..

(a) Means except for sunshine and evaporation over standard 30-year period 1961–1990. (b) Mean number of days when cloud cover equalled or exceeded seven-eighths. (c) Mean number of cloud cover was less than or equal to one-eighth. (d) Class-A Pan.

Source: Bureau of Meteorology, Melbourne.

2.7 AVERAGE MEASUREMENTS OF CLIMATIC ELEMENTS, MELBOURNE

Meteorological element	Spring	Summer	Autumn	Winter
Atmospheric pressure (hectopascals)	1 018.2	1 013.6	1 018.7	1 018.9
Maximum temperature of air in shade (°C)	19.6	25.1	20.6	14.4
Minimum temperature of air in shade (°C)	10.3	13.7	11.8	7.0
Relative humidity at 9 a.m. (per cent, saturation=100)	64.0	61.0	72.0	78.0
Rainfall (mm)	175.0	154.0	164.0	149.0
Number of days of rain	40.0	25.0	34.0	44.0
Amount of evaporation (mm)(a)	346.0	563.0	269.0	135.0
Daily amount of cloudiness (scale 0 to 8)(b)	4.9	4.2	4.8	5.2
Daily hours of sunshine(c)	6.5	8.4	5.6	4.5
Number of days of fog	1.4	0.6	5.7	10.1

(a) Measured by Class A Pan (records commenced 1967). (b) Scale: 0 = clear, 8 = overcast. (c) Measured at Laverton (records commenced 1968).

Source: Bureau of Meteorology.

Environment

Recognition is increasing of the interdependency between people and the environment. The health of the environment not only affects the quality of life experienced by people; it also determines the availability of the basic resources—air, water and land—which are essential for life.

In June 1994, an ABS survey collected information about people's concern for environmental problems and their views on environmental protection and economic growth. In Victoria, 67% of people expressed concern about environmental problems. Air and ocean pollution, destruction of trees/ecosystems and freshwater pollution were the environmental problems which raised the greatest concern.

Environmental protection and economic growth were ranked as being equally important by 71% of people.

Photo:

Whale Rock Tidal River

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Air

The Environment Protection Authority (EPA) began monitoring air quality in Victoria in the early 1970s. The major pollutants monitored were ozone, sulphur dioxide, nitrogen oxides, carbon monoxide, air-borne particles, hydrocarbons and lead.

Melbourne's air quality rates well by international standards for cities of similar size. The Victorian air quality objectives provide a framework for assessing air quality and are similar to internationally recognised standards. The number of breaches of objectives have declined significantly in the last 15 years in spite of significant increases in both population and motor vehicle numbers. Breaches are usually associated with particular weather patterns which are characterised by a temperature inversion and slow moving air mass, creating ideal conditions to allow the build-up of pollutants.

Problems are generally confined to photochemical smog (of which ozone is the main component) in summer, and fine particles in autumn and winter. Motor vehicle emissions are a major contributor to each problem, although fuel reduction burning and solid fuel combustion are also significant contributors to particle pollution during autumn and winter.

Lead level in air concentrations have shown a steady decrease. This downward trend is a result of a phased reduction of lead in petrol and the introduction of unleaded petrol in 1985. These combined actions have been a contributing factor to the reduction of blood lead levels in Victorian children, which have roughly halved since 1979.

Water

Good quality water is essential to maintain human life and protect natural ecosystems. As all people live in catchments, their activities have a direct impact on the water quality of streams and rivers and coastal waters. In Australia, a high proportion of people live in coastal urban centres. As a result, considerable pressure is exerted on coastal waters from urban run-off and recreational demands. Groundwater is important in supporting many aquatic ecosystems and wetlands. In addition, many communities rely on good quality groundwater for drinking, agricultural and industrial use.

Water pollution can be divided into two main types. The first is point-source pollution, in which the pollutant's source is localised and identifiable, e.g. the discharge drains of industrial or sewerage treatment plants. The second is diffuse water pollution, where the pollutant is derived from activities across a large area, for example, inputs of sediment associated with land use practises. The EPA facilitates the monitoring, and where necessary monitors, the quality of inland, coastal and groundwaters and works with industry, agricultural and community groups to address key problems.

The impact of point-source pollution in Victoria has steadily decreased as a result of education, licensing and waste minimisation programs. However, diffuse water pollution remains a significant concern. In Victoria, problems of this nature include high levels of nutrients, turbidity and salinity which adversely affect the quality of our waterways.

The major nutrients of concern are nitrogen and phosphorous. These are found in urban and rural run-off, erosion, sewage and animal faeces. Algal blooms, which can result in fouling of waterways, depletion of oxygen levels and the production of toxins, are one of the major problems caused by high nutrient levels. Nutrients are of particular concern in waterways across the State. The Victorian Nutrient Management Strategy released by the Victorian government in March 1995 provides a policy and planning framework to help local communities manage nutrient levels.

The Yarra River is a major feature of Melbourne. The quality of water in the Yarra is an important reflection on environmental management with the catchment. High turbidity, litter, suspended solids and E.coli are major concerns in the Yarra River Catchment. Urban development and areas of poor land management, including areas subject to erosion, affect the quality of run-off in this catchment.

Photo:

Litter boom across Yarra

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Coastal and marine ecosystems are highly valued and sensitive environments, subject to intense commercial and recreational activities. The water quality around Victoria's coast is generally good with the exception of some areas where inputs from urban drainage and treated sewerage effluent affect water quality. Even at these locations, conditions are generally within acceptable limits. However, there is growing concern about the introduction of exotic plant and animal species such as the giant kelp (*Undaria Pinnatifida*) and the fanworm (*Sabella Spallanzanii*), via ballast water or attached to the hulls of ships.

Land

Land is a vital element of the environment. It provides the base for food production, recreational grounds, homes and industrial and commercial developments. Land use practises are important in maintaining and improving the quality of the environment whilst also meeting the economic and social needs of the community.

An increasing number of contaminated sites are being identified as a consequence of changing land use, in particular the redevelopment of inner urban industrial areas to residential use. Sites that are found to threaten the health of people using them or which have off-site impacts are monitored by the EPA, which maintains a register of sites that may be subject to clean-up under EPA direction. In Victoria, at December 1996 there were 13 such sites registered.

The EPA also maintains records of sites that are known to be contaminated but do not present a risk to health or the environment under the current or proposed use of the site. These sites are not listed on the Priority Sites Register, however site contamination assessments (statutory environmental audit reports) are retained by EPA and statements of the suitability of land for the existing or proposed land use are supplied to the relevant planning authority for future reference.

Deforestation and agricultural practices can have a significant impact on the environment, contributing to soil salinity, erosion and to turbidity, through siltation, in our waterways. Education and revegetation programs are being implemented along with changes to agricultural practices to redress these problems.

National Parks

The first Victorian national park was declared at Tower Hill near Warrnambool in 1892, followed by the temporary reservation of Mount Buffalo and Wilsons Promontory in 1898. By 1930, 9 other parks had been reserved. These parks were managed by individual committees of management comprised of volunteer members and had little access to government funding or trained staff.

Photo:

Cape Schanck, Mornington Peninsula

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During the first half of this century there was a lack of cohesion in the selection and reservation of land for park use and of consistency in the management of parks. A Land Conservation Council's Park and Forests Services Study in 1993 found that as far back as 1906, '....local people and the Department of Lands were interested in the possibility of revenue generated by tourism' while '....naturalists were concerned primarily to preserve wildlife and forests but some also argued that they had a responsibility to future generations to reserve tracts of untouched bushland'.

In 1952, a number of groups and individuals, who had been intensively involved in the campaign to create national parks in Victoria, formed the Victorian National Parks Association (VNPA), an association which over the years has maintained an active involvement with parks. The VNPA was instrumental in achieving the establishment of national parks legislation in 1956 and a National Parks Authority. Subsequently, 11 new national parks were created between 1957 and 1972.

The 1970s saw the creation of the Land Conservation council which was given responsibility for advising the Government on the balanced use of public land in Victoria. Parks Victoria was created in December 1996 through the merger of the National Parks Service and Melbourne Parks and Waterways.

As well as caring for Melbourne's rivers, Parks Victoria manages the State's parks system, encompassing close to four million hectares of National, State, Regional and Metropolitan parks and key cultural properties.

In total, Parks Victoria manages 16% of Victoria's land area attracting over 25 million visits per year, in addition to the millions of visitors to the bays.



Photo:

Pillar Point (The Prom)

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Parks Victoria manages:

- 35 National Parks
- 3 Wilderness Parks
- 34 State Parks
- 11 Marine and Coastal Parks and Reserves
- 85 Regional Parks
- 3,000 Crown Reserves
- Key Heritage Properties such as Coolart Wetlands and Homestead and the Mansion at Werribee Park, plus over 200 historic places.
- Sanctuaries (e.g. Serendip Bird Sanctuary)
- Gardens (e.g. National Rhododendron Gardens, Seawinds)
- Port Phillip Bay and Western Port
- Yarra, Maribyrnong and Patterson Rivers

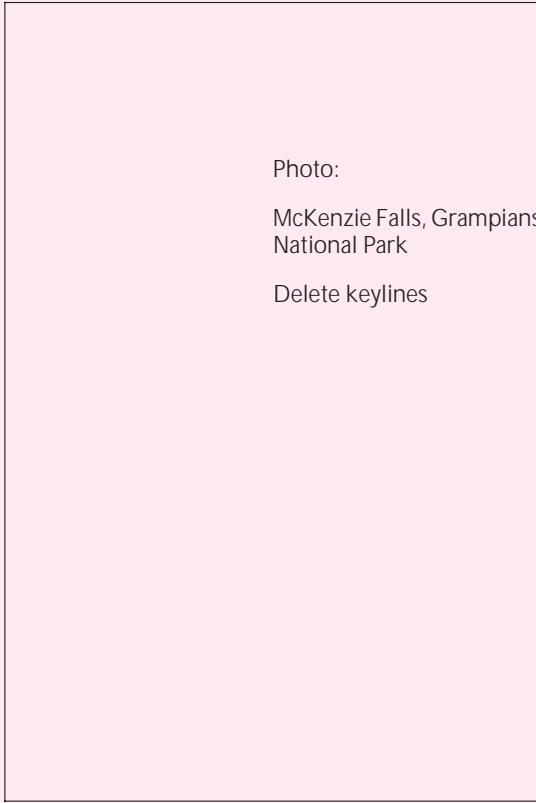


Photo:

McKenzie Falls, Grampians
National Park

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Sources: Victorian Auditor-General's Office, Special Report No.34, *Managing Parks for Life*, 1995;
Parks Victoria.

Waste management Governments in Australia are committed to reducing waste through avoidance, reuse and recycling. Local Government is responsible for provision of domestic waste management services such as garbage collection and also provides local recycling programs. The EPA is working with local councils and other bodies to promote waste reduction and in conjunction with EcoRecycle Victoria to improve the efficiency of kerbside recycling collections.

Improvements are also being made to the planning and management of landfill sites in Victoria through rationalisation of waste management across the State. As from May 1997 all municipalities are members of regional waste management groups responsible for regional waste planning and co-ordination.

Two agencies, the Recycling and Resource Recovery Council and the Waste Management Council, which were responsible for some waste management issues in Melbourne, Bendigo, Ballarat and Geelong have been succeeded by EcoRecycle Victoria with a State-wide ambit. The landfill levy has been extended to all licensed landfills across Victoria.

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Chapter 3

Government

Photo:

Parliament House

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OVERVIEW

There are three levels of government conducted within Australia. The Commonwealth, State and Local governments in each of the six States and two Territories co-ordinate and manage different aspects of policy, planning and administration associated with legislature, regulation and service delivery.

Information in this chapter relates to the system of Government administered in Victoria at each of these levels.

Commonwealth Constitution and Government

Under the Australian Constitution the legislative power of the Commonwealth of Australia is vested in the Parliament of the Commonwealth. The Queen, Australia's formal head of state, is represented by the Governor-General of Australia and the Governors of the six States, each of whom exercise the constitutional powers of a head of state in their respective spheres.

The Commonwealth Constitution grants the Commonwealth power in specific areas such as foreign affairs, defence, trade, postal services and telecommunications. Where the Commonwealth has no jurisdiction, or chooses not to exercise its powers, in areas such as the administration of public transport, police, fire and ambulance services, the States maintain responsibility. In practice, the administration and funding in some areas is shared. Education and health are examples.

The States and the Commonwealth each have democratically elected Parliaments derived from the British (Westminster) parliamentary system. Although many features of the Commonwealth Constitution (including the federal structure) are based on the constitution of the United States, the main features of the Westminster system have been retained. Most of the parliaments are bicameral (comprising an upper house and lower house) except for the Australian Capital Territory and the Northern Territory where government rests with a single house, and Queensland, where the upper house was abolished in 1922.

In the Commonwealth Parliament there are 76 members in the Upper House (Senate). Twelve members represent each State with 2 from each of the Territories. Elections for the Senate were last held on 2 March 1996.

Members of the Lower House (House of Representatives) are chosen by the constituents of electorates in each State to provide representation in Parliament for a maximum three year term. Following the March 1996 election there were 148 members of the Lower House comprising: New South Wales 50; Victoria 37; Queensland 26; Western Australia 14; South Australia 12; Tasmania 5, with the Australian Capital Territory and the Northern Territory having 3 and 1 respectively.

Victorian Constitution and Government

Victoria has been self-governed since 1851, with the first parliament formed in 1856. On 1 January 1901 Victoria ceased to be an independent colony and became a state of the newly formed Commonwealth of Australia.

Under the Victorian Constitution the Parliament of Victoria comprises the Crown (Governor of Victoria), the Legislative Council (Upper House) and the Legislative Assembly (Lower House).

The term of a Parliament is currently three years (minimum) with a mandatory general election required to take place during the fourth year.

The Governor is appointed for a five year term. The current Victorian Governor is the Honourable Sir James Gobbo. His term is due to expire in April 2001.

The Victorian Government Ministry, comprising the Premier and ministers, is drawn from both houses of Parliament. The support of the majority of members of the Lower House is required in order to form and empower the ministry to govern.

The Premier of Victoria is the leader of the Government in the Parliament. Government ministers assume a range of ministerial and portfolio responsibilities relating to the administration and provision of services to the people of Victoria.

The Victorian Government has responsibilities relating to the management of the State's finances, the provision of a range of services including health, education and public transport, and the administration of areas such as law and order, agricultural development, state-based public utilities and urban and regional development. The primary sources of revenue for the funding of these services is derived from Commonwealth Government Grants and State Government taxes.

The Legislative Council

There are 44 members of the Legislative Council representing 22 Electoral Provinces (two Councillors for each province). Members of the Legislative Council are elected for two terms of the Parliament. Half of the Council members are required to face re-election at any general election.

The Legislative Council is often referred to as the 'House of Review' and its primary role is to provide a 'second opinion' or review of bills and measures proposed by the Lower House.

The Presiding Officer of the Legislative Council is known as the President of the Council.

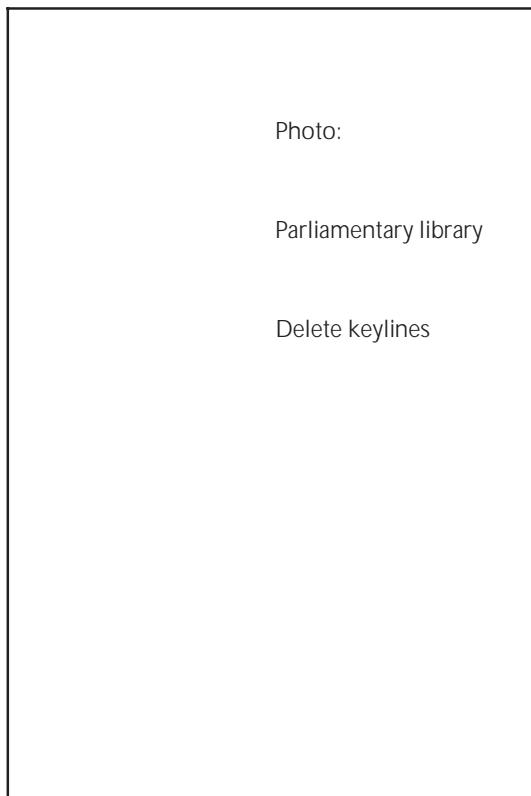
The Legislative Assembly

There are currently 88 members of the Legislative Assembly, each representing the constituents of a single Electoral District. Members are elected for the term of the parliament.

The Legislative Assembly or Lower House is also known as the seat of Government. The political party (or group of parliamentarians) who control the majority of support in the Legislative Assembly can form Government.

The Premier of the State is the leader of the majority of the Lower House. The official opposition is the largest grouping or political party which opposes the government.

The Presiding Officer of the Legislative Assembly is known as the Speaker and is a Lower House member selected by the Government. The Speaker is responsible for the conduct of the Lower House and along with the Presiding Officer of the Upper House, represents the Parliament on official and ceremonial occasions.

**Victorian
Government
Ministry**

A simultaneous election for the Legislative Council and the Legislative Assembly of the Victorian Parliament was held on 23 March 1996. The Liberal Party/National Party Coalition, under the leadership of the Hon. Jeffrey Kennett, was re-elected. (Refer to page 40 of the 1996 Victorian Year Book for a list of Victorian Premiers, 1943 to 1996.)

Following the Gippsland West and Mitcham by-elections the state of the parties was as follows: Legislative Council (Upper House) – Liberal Party 28 seats, Australian Labour Party 10 seats, National Party 6 seats. Legislative Assembly (Lower House) – Liberal Party 47 seats, Australian Labour Party 30 seats, National Party 9 seats, Independent 2 seats. The Government Ministry consisted of the following members as at December 1997:

LEGISLATIVE ASSEMBLY

The Hon. Jeffrey Kennett	Premier, Minister for Multicultural Affairs, Minister for the Arts
The Hon. Robin Cooper	Minister for Transport
The Hon. Phillip Gude	Minister for Education
The Hon. Ann Henderson	Minister for Housing, Minister responsible for Aboriginal Affairs
The Hon. Phil Honeywood	Minister for Tertiary Education and Training, Minister assisting the Premier on Multicultural Affairs
The Hon. Bill McGrath	Minister for Police and Emergency Services, Minister for Corrections

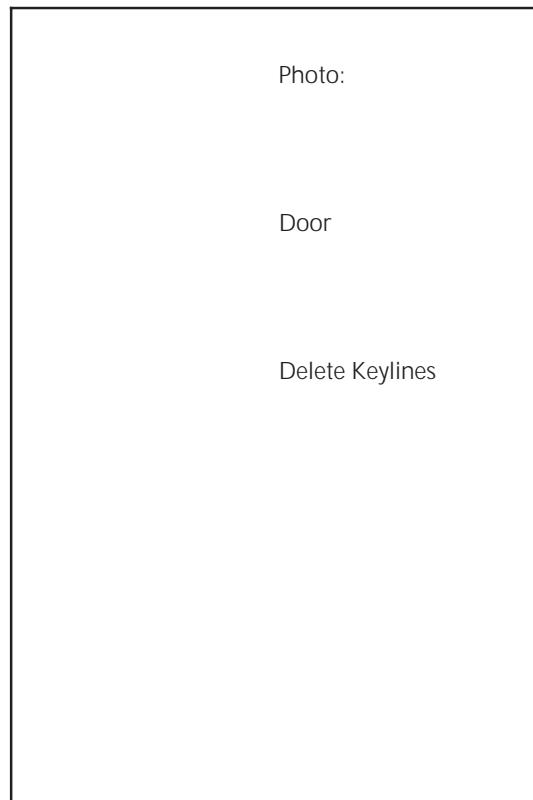
LEGISLATIVE ASSEMBLY — *continued*

The Hon. Patrick McNamara	Deputy Premier, Minister for Agriculture and Resources
The Hon. Robert Maclellan	Minister for Planning and Local Government
The Hon. Dr. Denis Napthine	Minister for Youth and Community Services
The Hon. Tom Reynolds	Minister for Sport, Minister for Rural Development
The Hon. Alan Stockdale	Treasurer, Minister for Multimedia
The Hon. Marie Tehan	Minister for Conservation and Land Management
The Hon. Jan Wade	Attorney-General, Minister for Women's Affairs, Minister for Fair Trading

LEGISLATIVE COUNCIL

The Hon. Louise Asher	Minister for Small Business, Minister for Tourism
The Hon. Mark Birrell	Minister for Industry, Science and Technology
The Hon. Geoff Craige	Minister for Roads and Ports
The Hon. Roger Hallam	Minister for Finance, Minister for Gaming
The Hon. Rob Knowles	Minister for Health, Minister for Aged Care

Source: Information Victoria, Department of State Development.



Parliamentary Committees

An important component of the Parliamentary process is the work conducted by Parliamentary Committees. Parliament may form these investigatory committees to examine particular issues of interest to the Parliament. Such committees may be either 'standing' committees, which exist for the life of the Parliament, or 'select' committees, which exist for the duration of a particular investigation.

Currently there are nine standing committees. These are known in the Parliament of Victoria as Joint Investigatory Committees and comprise both Government and Opposition members from both houses. While investigating particular issues the Parliamentary Committees examine information from many sources, including public submissions. This process of investigation, consultation and debate provides substantial input to the formation of new legislation. The current standing committees are as follows:

Those reporting to the Legislative Assembly –

Drugs and Crime Prevention Committee
Economic Development Committee
Public Accounts and Estimates Committee
Scrutiny of Acts and Regulations Committee

Those reporting to the Legislative Council –

Environment and Natural Resources Committee
Family and Community Development Committee
Federal–State Relations Committee
Law Reform Committee
Road Safety Committee

Victorian Government departments and statutory authorities

Victorian government departments and statutory authorities administer legislation, implement government policy, provide policy advice to government, and supply goods and services within Victoria.

In 1996, following the election, the 11 existing Victorian Government agencies were restructured to form the following 8 departments:

Department of Premier and Cabinet including: the Office of Multicultural Affairs; and Arts Victoria.

Department of Treasury and Finance including: State Owned Enterprises; Workcover; the Victorian Casino and Gaming Authority; and Public Sector Industrial Relations.

Department of State Development including: Industry and Employment; Science and Technology; Small Business Victoria; Tourism Victoria; Office of Rural Development; and Multimedia.

Department of Education including: Directorate of School Education; and Office of Technical and Further Education.

Department of Human Services including: Health; The Aged; Housing; Aboriginal Affairs; Youth Affairs; and Community Services.

Department of Justice including: Attorney-General; Women's Affairs; Office of Fair Trading; Victoria Police; Emergency Services; and Office of Corrections.

Department of Infrastructure including: Planning and Local Government; Transport; and Roads and Ports.

Department of Natural Resources and the Environment including: Agriculture Victoria; Agriculture and Catchment Management; Minerals and Petroleum; Fisheries Victoria; Forest Services; National Parks Victoria; and Land Management and Resource Unit.

Further information can be found in the Victorian Government Directory, which is compiled by Information Victoria, Department of State Development or on the Internet (<http://www.vicnet.net.au>).

Photo:

Old treasury building

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Local Government administration

As at 30 June 1997, Victoria comprised, for local government purposes, 78 local government (municipal) districts. These municipalities included 31 Cities (including 4 Greater Cities), 6 Rural Cities, 40 Shires and 1 Borough.

There are several unincorporated areas of Victoria (i.e. not part of a municipality). These include: French Island (154 square kilometres) situated in Western Port Bay; Lady Julia Percy Island (1.3 square kilometres) located off Port Fairy; the Bass Strait Islands (3.8 square kilometres); and the Gippsland Lakes (part) (309 square kilometres).

In 1993, restructuring of local government in Victoria commenced, resulting in a reduction in the number of local government authorities from 210 to 78. Prior to this restructure, the number of municipal districts in Victoria had not changed since 1985 (when the Borough of Koroit merged with the Shire of Warrnambool) and before that, in 1968, when the number of municipalities had increased from 206 to 211.

The reduction in the number of municipal districts from 210 to 78 in 1992 followed a review by the Victorian Government and recommendations for the extensive restructure of local government in Victoria.

Environmental management, infrastructure, airports, urban growth and the metropolitan economy emerged as key issues for Melbourne municipalities during the review.

Changes in the administration of councils accompanied the local government restructure and commissioners were appointed to oversee each restructured municipality during the transitional period leading up to elections. By 30 June 1997 all but Darebin and Melton had elected local government councillors. Melton had voted to retain commissioners until 1999 and the elected council at Darebin has been suspended.

Further change to the management of councils was undertaken through the introduction of Compulsory Competitive Tendering (CCT). Under this process each Council was responsible for the public tendering of at least 20% of its total operating expenditure in 1994–95. Tendering levels increased to 50% in 1996–97. There have been some further refinements in the calculation and administration of CCT. Verbal contracts can be obtained for work to the value of \$5,000 and written quotes for work to the value of \$50,000.

Municipal councils have the power to enact by-laws in a number of specified areas. These powers relate to administration of roads and bridges, (for which there is a construction and maintenance responsibility); drainage; building control; community welfare, including infant and pre-school centres, home help, elderly citizens, and meals-on-wheels; garbage; and parking and traffic engineering.

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Chapter 4

Population

Photo:

Moomba 97

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OVERVIEW

Population figures provide an image of the community, enabling planning and distribution of resources by all levels of government. In this chapter, population statistics from a number of sources are presented.

A population overview is obtained through Estimated Resident Population figures which provide information about the increase or decrease of the population across Victoria; population projections assist in planning for the future needs of the community as the age composition changes; and Census data allows the study of small geographic areas or population groups.

Also included in this chapter are vital statistics on births, deaths, life expectancy, marriages and divorces. These data are complemented with further information about families and indigenous Australians which are drawn from various data sources.

An official count of the population of the district of Port Phillip (now known as Victoria) was first undertaken in 1836, less than one year after the arrival of John Batman.

It was not until 1911, following the proclamation of the Census and Statistics Act 1905, that a national census coordinated by a single authority, the Commonwealth Bureau of Census and Statistics (now known as the Australian Bureau of Statistics), was conducted on a uniform basis for all States and Territories.

The ABS conducted the thirteenth Census of Population and Housing on Tuesday 6 August 1996. Following the recent passing of the Territories Law Reform Act of 1992, this census, for the first time, included the Cocos (Keeling) Islands and Christmas Island.

Victoria's image as a multicultural State is supported by the fact that nearly 20% of its population comes from countries where English is not the main language spoken – the highest proportion of any State or Territory.

Similarly to the rest of Australia, Victoria has an ageing population, with an increasing proportion of people aged over 65 years and a decreasing proportion of people under 15 years of age. Victorians can now look forward to longer lives, with life expectancy for children born in 1994 being about 76 years for males and 81 years for females.

In 1995–96 Victoria's population grew at more than twice the rate for 1994–95. This was mainly due to a fall in net migration loss to other States (16,359), the lowest in 5 years.

Population

As at June 1996, Australia's Estimated Resident Population (ERP) was 18,311,500, an increase of 248,200 or 1.4% over the previous year. During the same period the population of Victoria rose by 1.0% to 4,560,800.

Victoria is the most densely populated Australian State, averaging 20 persons per square kilometre at 30 June 1996, compared with the Australian average of just over two persons per square kilometre. At 30 June 1996, an estimated 3,248,800 persons lived in the Melbourne Statistical Division (MSD), representing 71% of Victoria's population.

4.1 POPULATION: AREA, ESTIMATED RESIDENT POPULATION(a), AND POPULATION DENSITY OF STATES AND TERRITORIES

State or Territory	Area sq km	Estimated resident population at June 30			Percentage increase in population from 1995 to 1996 %	Persons per square kilometre (at 1996)	Percentage of population in each State or Territory (at 1996) %
		1991 '000	1995r '000	1996 '000			
New South Wales	801 600	5 898.7	6 127.0	6 204.7	1.3	7.7	33.9
Victoria	227 600	4 420.4	4 517.4	4 560.2	0.9	20.0	24.9
Queensland	1 727 200	2 961.0	3 265.1	3 338.7	2.2	1.9	18.2
South Australia	984 000	1 446.3	1 469.4	1 474.3	0.3	1.5	8.1
Western Australia	2 525 500	1 636.1	1 733.8	1 765.3	1.8	0.7	9.6
Tasmania	67 800	466.8	473.7	474.4	0.1	7.0	2.6
Northern Territory	1 346 200	165.5	177.6	181.8	2.3	0.1	1.0
Australian Capital Territory	2 400	1288.6	304.8	308.3	1.1	128.5	1.7
Australia	7 682 300	17 283.3	18 071.8	18 310.7	1.3	2.4	100.0

(a) Estimated Resident Population (ERP) should not be confused with the census count, the latter being the count of the population on census night. ERP takes into account under-enumeration and reflects normal place of residence.

Source: *Australian Demographic Statistics* (Cat. no. 3101.0).

Regional population

The City of Melbourne has, in the last few years undergone a burst of residential building activity to have the third highest growth of any Local Government Area (LGA) in the MSD. Within the rest of the MSD growth has continued to be concentrated on the outer fringes of Melbourne, with the other top growth LGAs in the MSD over the period 1991-1996 being Casey, Wyndham, Hume, Melton and Cardinia. The five municipalities with the greatest rate of population decline over that period were Monash, Maribyrnong, Whitehorse, Darebin and Banyule.

In country Victoria, the top five growth municipalities between 1991 and 1995 were Surf Coast, Wodonga, Moorabool, Macedon Ranges and Bass Coast. The municipalities with the greatest rate of population decline were Buloke, Loddon, West Wimmera, Yarriambiack and Hindmarsh.

Statistical Local Areas (SLAs) are defined within the LGAs. Each LGA can consist of one or more SLAs. The maps on the following pages show the areas where the greatest and least growth has occurred by SLA.

4.2 URBAN CENTRES(a), VICTORIA, 1996 CENSUS

Urban centre	Population	Urban centre	Population	Urban centre	Population
Melbourne	2 865 329	Kerang	3 883	Diggers Rest	1 762
Geelong	125 382	Cobram	3 865	Wonga Park	1 759
Ballarat	64 831	Queenscliff	3 832	Robinvale	1 758
Bendigo	59 936	Kyneton	3 757	Whittlesea	1 744
Shepparton-Mooroopna	31 945	Gisborne	3 578	Merbein	1 736
Melton	30 304	Yarrawonga-Mulwala		Casterton	1 731
Warrnambool	26 052	(Yarrawonga Part)	3 435	Millgrove	1 701
Albury-Wodonga (Wodonga part)	25 825	Daylesford	3 278	Mount Beauty	1 649
Cranbourne	24 752	Camperdown	3 153	Heyfield	1 602
Mildura	24 142	Numurkah	3 128	Seville	1 578
Sunbury	22 126	Wallan	3 115	Heathcote	1 565
Traralgon	18 993	Hurstbridge	3 089	Dimboola	1 557
Wangaratta	15 527	Cowes	3 060	Launching Place	1 546
Moe-Yallourn	15 512	Woodend	2 974	Drysdale	1 474
Morwell	13 823	Beechworth	2 953	Strathfieldsaye	1 467
Sale	13 366	Tatura	2 826	Nathalia	1 455
Craigieburn	12 919	Cockatoo	2 798	Ballan	1 414
Horsham	12 591	Korumburra	2 739	Cobden	1 408
Bacchus Marsh	11 279	Kilmore	2 710	Donald	1 383
Ocean Grove-Barwon Heads	11 272	Myrtleford	2 705	Riddells Creek	1 367
Bairnsdale	10 890	Euroa	2 697	Stratford	1 350
Echuca-Moama (Echuca part)		Paynesville	2 661	Nagambie	1 335
Colac	10 014	St Arnaud	2 638	Heywood	1 305
Portland	9 793	Port Fairy	2 625	Beaconsfield Upper	1 283
Pakenham	9 664	Red Cliffs	2 553	Mirboo North	1 265
Swan Hill	9 512	Rochester	2 553	Macedon	1 257
Hamilton	9 385	Mansfield	2 526	Maldon	1 255
	9 248	Warracknabeal	2 493	Ouyen	1 251
				Wandong-Heathcote	
Warragul	9 011	Inverloch	2 448	Junction	1 251
Benalla	8 582	Warburton	2 446	Yarra Glen	1 232
Maryborough	7 381	Portarlington	2 407	St Leonards	1 226
Lara	7 338	Romsey	2 366	Tyabb	1 223
Somerville	7 028	Broadford	2 350	Yallourn North	1 216
Ararat	6 890	Woori Yallock	2 344	Corryong	1 215
Castlemaine	6 690	Carrum Downs	2 339	Tongala	1 164
Clifton Springs	6 651	Creswick	2 327	Rosedale	1 134
Healesville	6 368	Trafalgar	2 239	Lancefield	1 127
Seymour	6 294	Orbost	2 150	Koo-Wee-Rup	1 118
Stawell	6 272	Yarra Junction	2 033	Charlton	1 096
Crib Point	6 198	Anglesea	1 995	Irymple	1 095
Torquay	5 984	Cohuna	1 979	Newhaven	1 091
		Balnarring			
Hastings	5 906	Beach-Merricks	1 961	Coleraine	1 084
Wonthaggi	5 887	Coldstream	1 939	Lorne	1 082
Kyabram	5 738	Rutherglen	1 904	Chiltern	1 080
Leopold	5 491	Pearcedale	1 899	Mount Helen	1 053
Lakes Entrance	5 248	Bright	1 898	Foster	1 049
Churchill	4 882	Nhill	1 890	Beaufort	1 039
Drouin	4 790	Terang	1 867	Winchelsea	1 027
Emerald	4 673	Alexandra	1 859	Bunyip	1 011
Leongatha	4 144	Yarram	1 807		
Maffra	4 033	Buninyong	1 791		

(a) An urban centre is defined as a population cluster of 1,000 or more people.

Source: *Census of Population and Housing, 1996*.

Population increase

The components of population growth are natural increase (the number by which live births exceeds deaths in the State of usual residence) and net migration, both from interstate and overseas. The rate of natural increase has fallen steadily since 1991 and was 0.63 in the year ended 30 June 1996. In the same period, annual net migration loss from Victoria reached a record of 21,200 in 1994. This was due to more Victorians moving interstate than people arriving from other States, combined with a net decrease in the number of overseas migrants. However, since 1995 the net interstate migration loss from Victoria was less than in the preceding two years. In addition, there was an increase in the number of overseas migrants arriving giving a net migration gain of 11,800, the first gain since 1991.

4.3 COMPONENTS OF POPULATION INCREASE, VICTORIA

Year ended 30 June	Natural increase	Net migration			Total population increase
		Overseas	Interstate	Total	
1991	34 950	23 513	-14 853	8 660	43 610
1992	33 441	18 362	-21 131	-2 769	30 672
1993	33 621	7 964	-28 442	-20 478	13 143
1994	32 474	10 698	-31 895	-21 197	11 277
1995	31 253	19 295	-24 948	-5 653	25 600
1996	28 148	28 149	-16 359	11 790	39 938

Source: *Australian Demographic Statistics* (Cat. no. 3101.0).

Of the departures from Victoria in the 12 months ended June 1996, 38% were to Queensland and 31% to New South Wales. Of arrivals to Victoria, 35% were from New South Wales and 29% from Queensland. Victoria had a net migration loss to all other States and Territories except South Australia and Tasmania.

4.4 INTERSTATE MIGRATION, VICTORIA

State of origin/destination	12 months ended			
	Arrivals to Victoria	Departures from Victoria	Arrivals to Victoria	Departures from Victoria
New South Wales	19 442	24 182	20 002	22 510
Queensland	14 628	31 069	16 334	27 939
South Australia	6 776	7 446	7 642	7 033
Western Australia	5 191	7 472	5 504	7 421
Tasmania	3 125	2 699	3 294	2 877
Northern Territory	2 052	2 922	2 276	3 234
Australian Capital Territory	2 231	2 603	1 999	2 396
Total	53 445	78 393	57 051	73 410

Source: *Migration Australia* (Cat. no. 3412.0).

Interstate departures from Victoria exceeded arrivals in every year between 1972 and 1996. However, the level of interstate departures from Victoria must be seen in the context of overseas migration patterns because of Melbourne's importance as a point of entry. Outward movement from Victoria is most often to New South Wales and Queensland.

Population projections

The following projections are based on a model that assumes constant fertility rates, a lower overseas migration gain and medium interstate migration losses.

Using these assumptions, the Victorian population is expected to reach 5 million by 2016 and grow to 5.7 million by the year 2046. By way of comparison, Australia's population is expected to be 21.3 million in 2016 and to reach 27.7 million in 2046.

Comparison between the proportionate distribution of population between now and 2046 shows losses in the share of the national population living in New South Wales, Victoria, South Australia and Tasmania in favour of Queensland, Western Australia, the Northern Territory and Australian Capital Territory. It is expected that Queensland will replace Victoria as the second most populous state between the years 2019 and 2029.

Age distribution

In 1996, 21% of the Victorian population were under 15 years of age, and 12% were 65 years of age or over. The proportion of people over 65 is projected to increase to 23% by the year 2046 while those under 15 years will decrease to 16% of the total population. The Australian population aged 85 years and over is expected to increase from 0.2 million in 1996 to 1.1 million in the year 2046.

ESTIMATED RESIDENT POPULATION, 1996 AND PROJECTED POPULATION 2016,
BY AGE AND SEX, VICTORIA

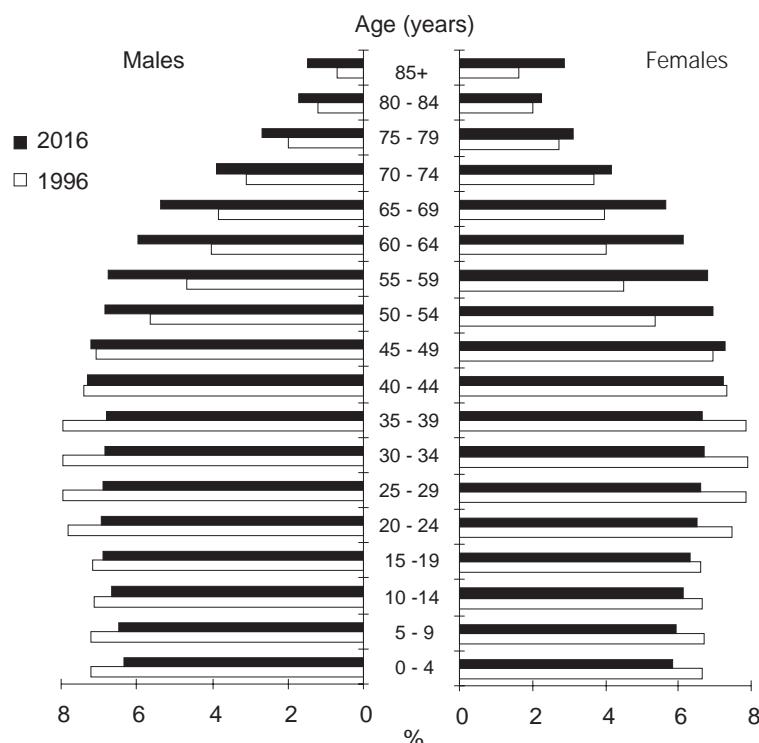


Photo: Old people's home

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4.5 ESTIMATED RESIDENT POPULATION BY AGE GROUPS, VICTORIA, 30 JUNE 1996 (PRELIMINARY)

Age group (years)	Males		Females		Persons	
	no.	%	no.	%	no.	%
0-4	162 192	7.2	153 866	6.7	316 058	6.9
5-9	162 751	7.2	155 214	6.7	317 965	7.0
10-14	160 169	7.1	153 466	6.7	313 635	6.9
15-19	161 338	7.2	153 105	6.6	314 443	6.9
20-24	175 615	7.8	172 316	7.5	347 931	7.6
25-29	179 195	8.0	181 622	7.9	360 817	7.9
30-34	178 980	7.9	182 462	7.9	361 442	7.9
35-39	179 566	8.0	181 608	7.9	361 174	7.9
40-44	166 535	7.4	169 296	7.3	335 831	7.4
45-49	158 925	7.1	159 985	6.9	318 910	7.0
50-54	126 899	5.6	124 304	5.4	251 203	5.5
55-59	105 098	4.7	103 745	4.5	208 843	4.6
60-64	90 371	4.0	92 705	4.0	183 076	4.0
65-69	86 371	3.8	91 906	4.0	178 277	3.9
70-74	70 234	3.1	85 358	3.7	155 592	3.4
75-79	45 201	2.0	62 647	2.7	107 848	2.4
80-84	27 433	1.2	46 323	2.0	73 756	1.6
85 and over	16 025	0.7	37 991	1.6	54 016	1.2
Total	2 252 898	100.0	2 307 919	100.0	4 560 817	100.0

Source: Australian Demographic Statistics (Cat. no. 3101.0).

Country of birth

At the time of the 1996 Census of Population and Housing, almost three quarters of the Victorian population had been born in Australia. A further 7% of the population originated in countries where English is the predominant language spoken (almost 5% from the United Kingdom).

Victoria had a higher proportion of people (26.3%) born overseas than the Australian average (24.5%) and had the greatest proportion of people from non-English speaking countries of any State or Territory. Italy (2.3%), Greece (1.4%) and Vietnam (1.3%) were the source of most migrants to Victoria from non-English speaking countries. In all cases the proportion of migrants was higher than the Australian average.

Photo: Country of birth

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4.6 POPULATION BY COUNTRY OF BIRTH AND SEX, VICTORIA AND AUSTRALIA, 1996

Country of birth	Victoria			Australia		
	Males no.	Females no.	Persons no.	Proportion %	Persons no.	Proportion %
Main English speaking countries						
Australia	1 553 575	1 615 273	3 168 848	72.5	13 227 776	74.5
Canada	2 250	2 460	4 710	0.1	25 132	0.1
Ireland	6 245	5 675	11 920	0.3	51 469	0.3
New Zealand	21 124	21 365	42 489	1.0	291 388	1.6
South Africa	5 664	5 976	11 640	0.3	55 755	0.3
United Kingdom(a)	106 173	108 376	214 549	4.9	1 068 852	6.0
USA	5 177	5 155	10 332	0.2	49 528	0.3
Total	1 700 553	1 764 621	3 464 488	79.6	14 769 900	83.2
Other countries						
China(b)	13 494	14 607	28 101	0.6	111 009	0.6
Germany	14 338	15 348	29 686	0.7	110 331	0.6
Greece	31 077	30 606	61 683	1.4	126 520	0.7
Hong Kong	7 710	7 891	15 601	0.4	68 430	0.4
India	12 321	11 939	24 170	0.6	77 551	0.4
Italy	51 064	47 167	98 231	2.3	238 246	1.3
Lebanon	7 160	6 782	13 942	0.3	70 224	0.0
Malaysia	10 829	12 206	23 035	0.5	76 255	0.4
Malta	12 571	11 579	24 150	0.6	50 879	0.0
Netherlands	13 189	12 104	25 293	0.6	87 898	0.5
Philippines	7 271	12 830	20 101	0.5	92 949	0.5
Poland	10 669	11 542	22 211	0.5	65 113	0.4
Former USSR & Baltic States(c)	8 817	10 193	19 010	0.4	49 751	0.3
Viet Nam	27 260	27 881	55 141	1.3	151 052	0.8
Former Yugoslavia	35 255	32 690	67 945	1.6	175 422	1.0
Other(d)	108 135	108 011	216 146	5.0	814 458	4.6
Total	371 070	373 376	744 446	17.1	2 366 089	13.3
Not stated	69 917	75 275	145 192	3.3	616 840	3.5
Total	2 141 195	2 212 931	4 354 126	100.0	17 752 829	100.0

(a) Comprises England, Scotland, Wales and Northern Ireland. (b) Excludes Taiwan Province. (c) Comprises former USSR and Baltic States, Armenia, Azerbaijan, Belarus, Estonia, Georgia, Kazakhstan, Kyrgyzstan, Latvia. (d) Includes 'inadequately described', 'at sea' and 'not elsewhere classified'.

Source: 1996 Census of Population and Housing.

Vital statistics

In 1996, Victoria had the second lowest birth rate of all the States and Territories. In 1996 the Victorian death rate was 7.2, compared to the Australian average of 7.0. Both the marriage and divorce rates, for 1996, were slightly below the Australian average.

4.7 SUMMARY OF VITAL STATISTICS: STATES, TERRITORIES, AND AUSTRALIA, 1996

Particulars	NSW	Vic.	Qld	SA	WA	Tas.	NT	ACT	Australia
Live births									
Males	44 448	31 587	24 533	9 710	12 813	3 346	1 861	2 241	130 572
Females	42 147	29 556	23 236	9 346	11 980	3 111	1 701	2 155	123 262
Persons									
No.	86 595	61 143	47 769	19 056	24 793	6 457	3 562	4 396	253 834
Rate(a)	14.0	13.5	14.2	12.9	14.1	13.6	20.0	14.3	13.9
Deaths									
Males	23 765	17 009	12 151	6 061	5 978	2 052	487	698	68 206
Females	21 376	15 717	10 130	5 545	5 049	1 820	271	602	60 513
Persons									
No.	45 141	32 726	22 281	11 606	11 027	3 872	758	1 300	128 719
Rate(a)	7.3	7.2	6.6	7.8	6.3	8.2	4.3	4.2	7.0
Infant deaths	499	308	304	94	160	29	41	25	1 460
Perinatal deaths(b)									
No.	832	450	406	143	210	56	38	35	2 170
Rate(c)	9.6	7.3	8.5	7.5	8.4	8.6	10.6	7.9	8.5
Marriages									
No.	35 716	26 074	20 913	8 011	10 294	2 654	787	1 654	106 103
Rate(a)	5.8	5.7	6.2	5.4	5.8	5.6	4.4	5.4	5.8
Divorces(d)									
No.	15 984	12 491	10 996	4 358	4 959	1 582	486	1 610	52 466
Rate(a)	2.6	2.8	3.3	2.9	2.8	3.3	2.7	(e)	2.9

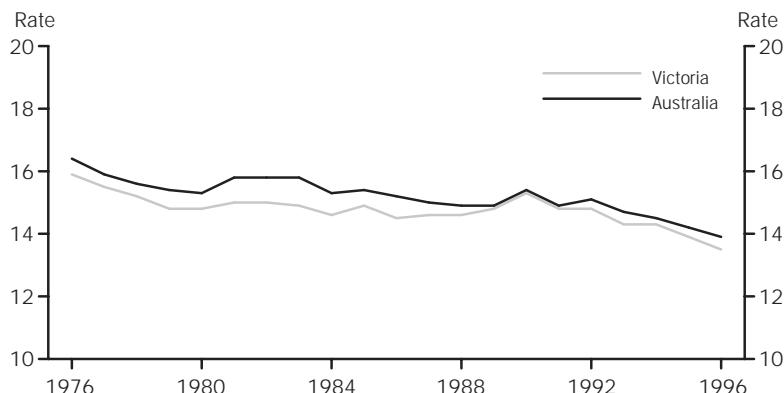
(a) Number per 1,000 estimated resident population. (b) Perinatal deaths comprise neonatal and fetal deaths. (c) The number of perinatal deaths per 1,000 live and still births. (d) Figures for Queensland include divorces heard in Lismore and Coffs Harbour (NSW) but registered in Queensland. (e) Includes a large number of divorces granted to residents of another State.

Source: *Demography, Victoria* (Cat. no. 3311.2).

Births

The number of live births registered to women resident in Victoria in 1996 was 61,143, a small decrease (2%) on the number registered in 1995.

Since 1992, the number of registered births has decreased slightly each year. Since 1991, birth rates have generally declined for women aged 15 to 29 years and increased for women aged 30 to 44 years. This change is reflected in the median age of mothers for all confinements of 29.9 years, which continued a long established upward trend.

CRUDE BIRTH RATES, VICTORIA AND AUSTRALIA

Source: *Australian Demographic Statistics* (Cat. no. 3101.0).

The upward trend toward ex-nuptial births appears to have halted in 1996 with 21.6% of births classified as ex-nuptial. This is a slight decrease on the 21.8% recorded in 1995. In 86% of such births in 1996 the father was acknowledged, which probably reflects the increasing number of defacto relationships.

4.8 SUMMARY OF BIRTHS AND CONFINEMENTS, VICTORIA

Particulars	1991	1992	1993	1994	1995	1996
Live births						
Males	33 636	33 691	32 793	32 904	32 108	31 587
Females	31 802	32 075	31 256	31 070	30 483	29 556
Persons	65 438	65 766	64 049	63 974	62 591	61 143
Sex ratio(a)	105.8	105.0	104.9	105.9	105.3	106.9
Birth rate(b)	14.8	14.8	14.3	14.3	13.9	13.5
Nuptial births	53 217	53 175	51 420	50 860	48 962	47 933
Ex-nuptial births						
No.	12 221	12 591	12 629	13 114	13 629	13 210
Percentage of total live births	18.7	19.1	19.7	20.5	21.8	21.6
Age-specific birth rates(c)						
Age group (years)						
19 & under	16.1	14.7	13.8	14.2	13.8	12.8
20-24	63.7	61.8	57.7	57.1	54.1	50.4
25-29	131.7	130.3	127.4	123.7	118.8	112.1
30-34	106.1	109.6	110.0	112.0	112.1	113.1
35-39	39.2	41.2	41.0	44.3	45.0	46.0
40-44	5.8	6.5	6.7	7.2	7.5	7.8
45 & over	0.2	0.4	0.2	0.3	0.3	0.3
Total fertility(d)	1 814	1 822	1 784	1 793	1 758	1 712
Confinements (no.)	64 566	64 898	63 172	63 085	61 685	60 294
Median age of mother (years)						
Nuptial first confinements	28.0	28.3	28.5	28.7	28.9	29.1
All nuptial confinements	29.5	29.7	29.9	30.1	30.3	30.5
Ex-nuptial	24.6	25.0	25.3	25.4	25.7	25.9
All confinements	28.9	29.2	29.3	29.5	29.7	29.9
Median duration of marriage (years)						
Nuptial first confinements	2.6	2.6	2.7	2.7	2.7	2.7

(a) Number of male live births per 100 female live births. (b) Number of live births registered during calendar year per 1,000 of mean estimated resident population. (c) Number of live births registered during calendar year according to age of mother per 1,000 of the female estimated resident population of the same age. (d) The sum of 5 year age-specific birth rates multiplied by 5. It represents the number of children 1,000 women would bear during their lifetimes if they experienced the rates of the year shown.

Source: *Demography, Victoria* (Cat. no. 3311.2).

Photo:

People and tram

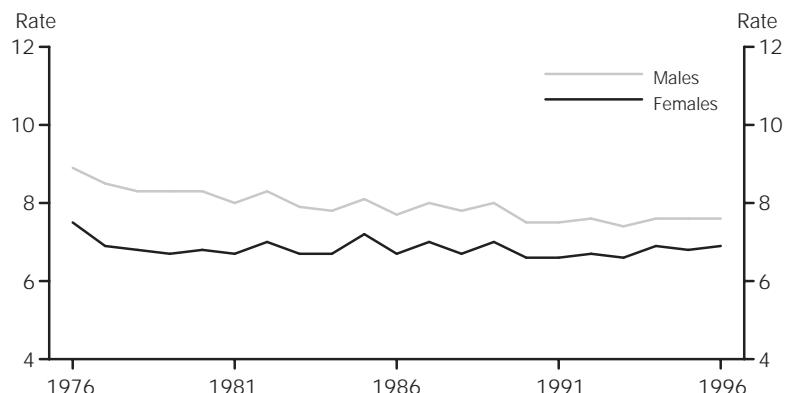
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Deaths

There were 32,726 deaths of Victorian residents registered in 1996. Of those 17,009 were males and 15,717 were females. This represented a marginal increase of 0.9% from the 32,425 deaths registered in 1995. The crude death rate (per 1,000 of the estimated resident population) for 1996, was 7.2, which was the same rate as that for 1995.

The main cause of death for Victorian residents in 1996 was diseases of the circulatory system (including heart attack and stroke), followed by cancer (malignant neoplasms). Diseases of the circulatory system accounted for 38% of male and 44% of female deaths, and cancer accounted for 30% of male and 26% of female deaths. (Refer to Chapter 7—Health and welfare for further information on Cause of Death).

CRUDE DEATH RATES, VICTORIA



Source: Australian Demographic Statistics (Cat. no. 3101.0).

4.9 SUMMARY OF DEATHS, VICTORIA

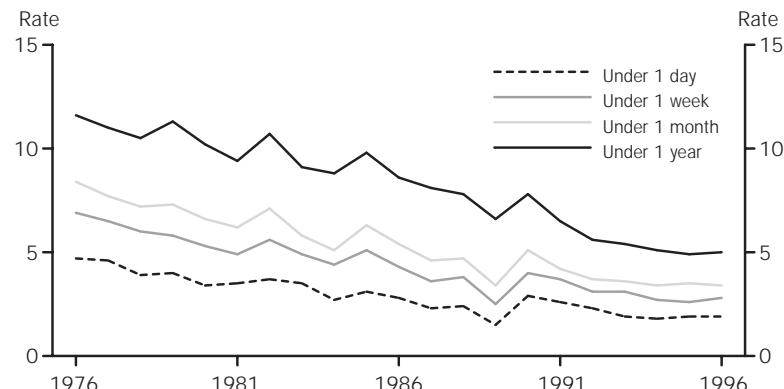
Particulars	1991	1992	1993	1994	1995	1996
Deaths						
Males	16 508	16 816	16 389	16 765	16 960	17 009
Females	14 708	15 135	14 808	15 588	15 465	15 717
Persons	31 216	31 951	31 197	32 353	32 425	32 726
Sex ratio(a)	112.2	111.1	110.7	107.6	110.0	108.2
Standardised death rate(b)						
Males	8.9	8.8	8.4	8.5	7.7	8.1
Females	5.4	5.3	5.1	5.1	7.0	5.0
Persons	6.9	6.8	6.5	6.6	7.2	6.3
Crude death rate(b)						
Males	7.5	7.6	7.4	7.6	7.6	7.6
Females	6.6	6.7	6.6	6.9	6.8	6.9
Persons	7.1	7.2	7.0	7.2	7.2	7.2
Infant deaths						
Males	249	220	200	189	161	179
Females	179	146	147	138	147	129
Persons	428	366	347	327	308	308
Infant mortality rate(c)	6.5	5.6	5.4	5.1	4.9	5.0
Median age at death (years)						
Males	72.6	73.2	73.5	74.0	73.9	74.7
Females	79.1	80.1	80.1	80.6	80.9	81.3

(a) Number of male deaths per 100 female deaths. (b) Number of deaths registered per 1,000 of the mean estimated resident population. (c) Deaths of children under one year of age per 1,000 live births.

Source: Demography, Victoria (Cat. no. 3311.2).

The infant mortality rate in 1996 was 5.0 deaths per 1,000 live births, marginally higher than the 4.9 recorded in 1995.

INFANT MORTALITY RATES, VICTORIA



Source: Australian Demographic Statistics (Cat. no. 3101.0).

Life expectancy

Life expectancy refers to the average number of additional years a person of a given age and sex might expect to live if the age specific death rates of the given year continued throughout his or her lifetime.

The life expectancy of a female child born in 1994-1996 to a mother resident in Victoria is 81.2 years, while for a male child the life expectancy is 75.6 years. A woman aged 40 in 1994-1996 has a life expectancy of a further 42.3 years, and a man the same age, 37.5 years. These life expectancies reflect the different mortality rates for the sexes.

4.10 LIFE EXPECTANCY (YEARS) BY SEX, VICTORIA, 1994-96

Age	Males	Females
0	75.6	81.2
5	71.1	76.7
10	66.2	71.7
15	61.2	66.8
20	56.4	61.9
25	51.7	57.0
30	47.0	52.1
35	42.2	47.2
40	37.5	42.3
45	32.8	37.5
50	28.2	32.8
55	23.8	28.2
60	19.6	23.8
65	15.8	19.6
70	12.4	15.6
75	9.5	12.0
80	7.0	8.8
85	5.1	6.3
90	3.8	4.4
95	3.2	3.2

Source: *Demography, Victoria* (Cat. no. 3311.2).

Marriages

In 1996 the number of marriages registered in Victoria was 26,074 a decrease of 2% from the number registered in the previous year. The number of marriages registered per year is continuing a downward trend, with the number of marriages registered in 1996 representing a 9% decrease on 1991. This is reflected in the decrease in the crude marriage rate from 6.5 marriages per 1,000 population in 1991 to 5.7 in 1996.

The median age at marriage, for all marriages, increased marginally from 29.0 years in 1995 to 29.4 years in 1996 for bridegrooms, and from 26.9 years in 1995 to 27.3 years in 1996 for brides. The median age for first marriage was 27.8 years for bridegrooms and 26.0 years for brides.

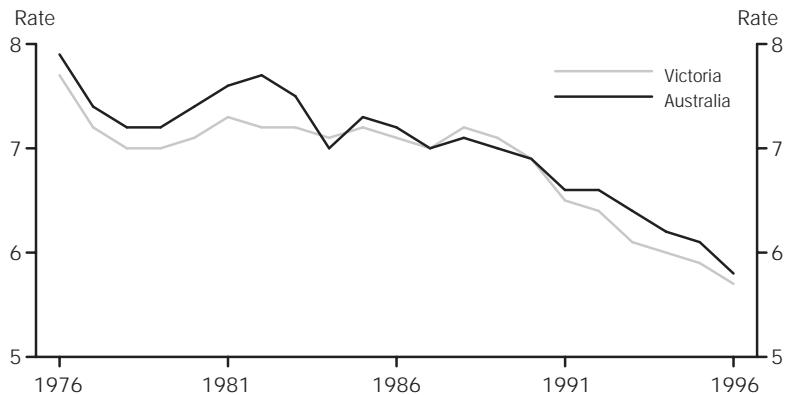
4.11 SUMMARY OF MARRIAGES, VICTORIA

Particulars	1991	1992	1993	1994	1995	1996
First marriage both partners	19 867	19 882	19 195	19 078	18 752	18 026
First marriage one partner	4 953	4 926	4 737	4 443	4 458	4 546
Remarriage both partners	3 715	3 621	3 486	3 453	3 397	3 502
Total marriages	28 535	28 429	27 418	26 974	26 607	26 074
Crude marriage rate(a)	6.5	6.4	6.1	6.0	5.9	5.7
Marriages performed by Ministers of religion						
no.	17 429	17 361	16 613	16 153	n.a.	14 415
%	61.1	61.1	60.6	59.9	n.a.	55.3
BRIDEGROOM						
Marital status of bridegroom						
Never married	22 167	22 140	21 435	22 062	20 790	20 089
Widowed	644	598	621	616	552	550
Divorced	5 724	5 691	5 362	5 296	5 265	5 435
Median age of bridegroom (years)						
Never married	26.8	27.0	27.0	27.3	27.4	27.8
Widowed	61.0	62.0	61.4	62.3	61.9	62.7
Divorced	39.6	39.5	40.4	40.5	40.9	41.3
Total	28.3	28.6	28.6	28.8	29.0	29.4
Age of bridegroom (years)						
Under 20	236	198	170	170	162	145
20-24	6 992	6 662	6 191	5 648	5 255	4 543
25-29	9 871	9 779	9 523	9 486	9 535	9 204
30-34	5 048	5 370	5 157	5 299	5 081	5 269
35-39	2 399	2 490	2 363	2 372	2 538	2 623
40-44	1 504	1 456	1 408	1 369	1 429	1 512
45-49	908	908	1 001	977	1 014	1 023
50 and over	1 577	1 566	1 605	1 653	1 593	1 755
BRIDE						
Marital status of bride						
Never married	22 520	22 550	21 692	21 537	21 172	20 509
Widowed	751	653	684	675	617	637
Divorced	5 264	5 226	5 042	4 762	4 818	4 928
Median age of bride (years)						
Never married	24.8	25.0	25.2	25.4	25.7	26.0
Widowed	53.5	53.7	54.2	54.5	54.3	54.6
Divorced	36.1	36.5	36.8	37.5	37.6	37.9
Total	26.1	26.3	26.4	26.6	26.9	27.3
Age of bride (years)						
Under 20	1 152	990	861	788	761	693
20-24	10 742	10 381	9 819	9 115	8 382	7 396
25-29	8 398	8 581	8 373	8 582	8 818	8 912
30-34	3 691	3 886	3 776	3 851	3 928	4 059
35-39	1 834	1 874	1 801	1 800	1 862	1 972
40-44	1 049	1 081	1 071	1 086	1 102	1 141
45-49	669	710	727	724	768	834
50 and over	1 000	926	990	1 028	986	1 067

(a) Number of marriages per 1,000 mean estimated resident population.

Source: Demography, Victoria (Cat. no. 3311.2).

CRUDE MARRIAGE RATES, VICTORIA AND AUSTRALIA



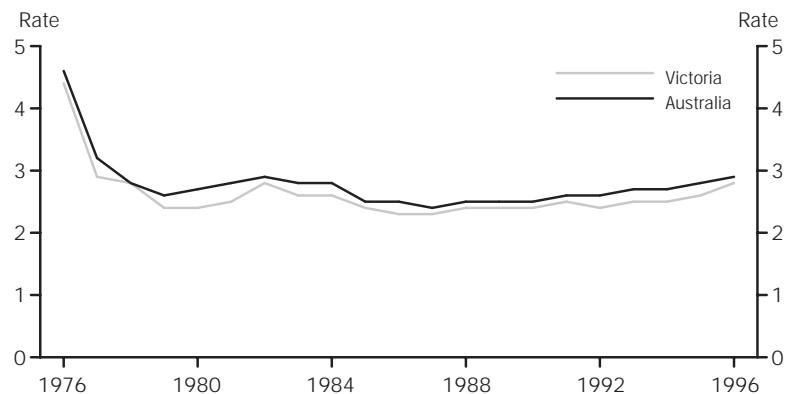
Source: Australian Demographic Statistics (Cat. no. 3101.0).

Divorces

The number of divorces granted in Victoria in 1996 was 12,491 an increase of 6% on the number granted in 1995.

The highest age specific divorce rate was in the 30 to 34 year age group for both husbands and wives. In 1996 the median age at divorce for husbands was 40.0 years and for wives 37.3 years, compared with 39.6 and 37.1 respectively in 1995.

CRUDE DIVORCE RATES, VICTORIA AND AUSTRALIA



Source: Australian Demographic Statistics (Cat. no. 3101.0).

Nearly 40% of the couples who divorced in 1996 had separated within 5 years of marriage (the most common interval was between two and three years), and 60% had separated within 10 years. The median interval between marriage and separation was 7.6 years.

4.12 SUMMARY OF DIVORCES, VICTORIA

Particulars	1991	1992	1993	1994	1995(d)	1996
Divorces granted	11 134	10 533	11 050	11 320	11 838	12 491
Crude divorce rate(a)	2.5	2.4	2.5	2.5	2.6	2.8
Median duration of marriage (years)	10.0	10.4	10.6	10.9	10.9	10.8
Median interval between marriage and separation (years)	7.3	7.5	7.7	7.7	7.6	7.6
Divorces involving children(b)						
No.	5 894	5 616	5 905	n.a.	n.a.	6 482
Percentage of total	52.9	53.3	53.4	n.a.	n.a.	51.9
Average number of children	1.9	1.9	1.9	n.a.	n.a.	1.9
HUSBAND (AGE-SPECIFIC DIVORCE RATE(c))						
Age group (years)						
Under 25	1.2	1.0	0.9	0.8	0.7	0.8
25-29	9.3	7.9	7.9	7.7	7.7	7.7
30-34	12.7	11.7	12.5	12.0	13.0	13.3
35-39	11.9	11.6	12.1	12.5	12.6	13.1
40-44	11.0	10.5	11.7	12.0	12.2	12.6
45-49	9.8	9.0	9.5	10.3	11.1	11.2
50-54	7.4	7.3	7.3	7.7	7.9	8.8
55 and over	2.2	2.3	2.2	2.5	2.5	2.9
Marital status at marriage						
Never married	9 380	8 899	9 249	9 366	n.a.	n.a.
Widowed	108	98	115	107	n.a.	n.a.
Divorced	1 646	1 536	1 686	1 847	n.a.	n.a.
Median age (years)						
At marriage	24.8	25.1	25.1	25.3	25.5	25.7
At separation	35.3	35.8	35.9	36.5	36.4	36.7
At divorce	38.1	38.6	38.9	39.5	39.6	40.0
WIFE (AGE-SPECIFIC DIVORCE RATE(c))						
Age group (years)						
Under 25	2.6	2.1	2.1	1.8	1.9	1.8
25-29	12.3	11.5	11.5	11.4	11.4	11.5
30-34	12.6	11.7	12.3	12.6	13.2	14.0
35-39	11.5	11.3	12.0	11.9	12.1	12.6
40-44	10.6	9.5	10.6	11.3	11.6	11.8
45-49	8.3	8.2	8.3	8.5	9.0	9.6
50-54	5.0	4.9	5.1	5.5	5.9	6.7
55 and over	1.0	1.0	1.0	1.2	1.3	1.4
Marital status at marriage						
Never married	9 450	8 923	9 423	9 520	n.a.	n.a.
Widowed	148	135	124	166	n.a.	n.a.
Divorced	1 536	1 475	1 503	1 634	n.a.	n.a.
Median age (years)						
At marriage	22.4	22.5	22.6	22.8	23.0	23.3
At separation	32.6	33.1	33.3	33.7	33.9	34.0
At divorce	35.4	35.9	36.3	36.7	37.1	37.3

(a) Number of divorces per 1,000 of the mean estimated resident population. (b) Family Court data for 1994 is incomplete; children's data not processed in 1995. (c) Number of divorces by age per 1,000 of the estimated resident population in specific age groups. (d) A number of data items, including marital status of parties, were not processed in 1995.

Source: *Demography, Victoria* (Cat. no. 3311.2).

REFERENCES

Data sources

The statistics in this chapter are derived from various sources including the Census of Population and Housing, the latest of which was conducted on 6 August 1996.

The estimated resident population was compiled according to the place of usual residence of the population. An explanation of the conceptual basis of this estimate is given in the ABS Information Paper Population Estimates: An Outline of the New Conceptual Basis of ABS Population Estimates (3216.0).

Data on overseas arrivals and departures are compiled from information supplied by the Department of Immigration, Local Government and Ethnic Affairs.

Interstate migration data are currently estimated on the basis of changes to Medicare registration information. Further details are given in the Australian Demographic Statistics publication.

Births, deaths, and marriages statistics are compiled from data supplied by the Registrar of Births, Deaths and Marriages while divorce statistics are compiled from Statistical Reports completed by the Family Court of Australia.

ABS sources

Statistical Geography, Victoria (Cat. no. 1103.2)

Australian Demographic Statistics (Cat. no. 3101.0)

Estimated Resident Population by Sex and Age: States and Territories of Australia (Cat. no. 3201.0)

Estimated Resident Population in Statistical Local Areas, Victoria, Preliminary (Cat. no. 3203.2)

Estimated Resident Population by Age and Sex in Statistical Local Areas, Victoria (Cat. no. 3207.2)

Projections of the Populations of Australia, States and Territories (Cat. no. 3222.0)

Births, Australia (Cat. no. 3301.0)

Deaths, Australia (Cat. no. 3302.0)

Marriages and Divorces, Australia (Cat. no. 3310.0)

Demography, Victoria (Cat. no. 3311.2)

Overseas Arrivals and Departures, Australia (Cat. no. 3404.0)

National Aboriginal and Torres Strait Islander Survey, Victoria (Cat. no. 4190.2)

Labour Force Status and Other Characteristics of Families, Australia (Cat. no. 6224.0)

Chapter 5

Education

Photo:

Jell's Park - children grouped around fire

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OVERVIEW

This chapter provides an overview of Education in Victoria, including details of the numbers of schools, teachers and students. Information relating to higher education and TAFE is also included.

In economic terms, the Education industry sector contributed 5.1% of the total Victorian Gross State Product (GSP) at factor cost in 1995–96. Victoria's percentage share of the national Gross Domestic Product (GDP) at factor cost for the Education sector was 27.5%.

Schools and teachers

There were 2,379 schools in Victoria in 1996, 7 schools fewer than in 1995. Government schools decreased by 11 while non-government schools increased by 4. The total enrolment of students in all Victorian schools in 1996 was 776,455, a marginal increase of 0.8% over the previous year. Of the total students enrolled, 56% were in primary schools and 44% were in secondary schools.

Government schools, which constituted 71% of total schools, had a student enrolment of 517,062, which represented an increase of 0.4% over 1995, while non-government school enrolments increased 1.5% over the same period to 259,393 students in 1996. Catholic schools comprised 73% of the 679 non-government schools in Victoria. Of students attending non-government schools, there were 176,080 (68%) enrolled in Catholic schools, 25,290 (10%) in Anglican schools and 58,023 (22%) in other non-government schools. The proportion of students enrolled in non-government schools was higher at secondary level, with the highest proportion (41%) being recorded in Year 12. Overall, 33% of students were enrolled in non-Government schools.

Photo:

Jell's Park - children planting trees

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Apparent retention rates are measures of the tendencies of students to remain in secondary education from Year 7 to the senior years of secondary schooling. The apparent retention rate to Year 12 increased from 47% in 1986 to 81% in 1992 and declined to 75% in 1996 (government schools 69%; non-government schools 86%).

The number of teaching staff (expressed in full-time equivalent units) increased by 0.5%, from 51,065 in 1995 to 51,340 in 1996. The average number of students per full-time teaching staff was 15.0 for non-government and 15.2 for government schools. The average ratios for all schools were 18.3 for primary and 12.4 for secondary schools.

5.1 SCHOOLS, STUDENTS, AND TEACHING STAFF(a), VICTORIA

Year	Government			Non-government			Total		
	Schools	Students	Teaching staff	Schools	Students	Teaching staff	Schools	Students	Teaching staff
1991	2 029	533 386	39 447	696	256 127	16 421	2 725	789 513	55 868
1992	2 013	533 909	40 550	687	253 713	16 192	2 700	787 622	56 741
1993	1 934	526 636	37 551	683	250 961	16 227	2 617	777 597	53 778
1994	1 731	520 328	34 635	679	252 866	16 661	2 410	773 194	51 295
1995	1 711	514 805	34 106	675	255 472	16 959	2 386	770 277	51 065
1996	1 700	517 062	34 045	679	259 393	17 295	2 379	776 455	51 340

(a) Number of full-time teaching staff plus full-time equivalents of part-time teaching staff.

Source: *Schools, Australia* (Cat. no. 4221.0).

5.2 NUMBER OF FULL-TIME STUDENTS: CATEGORY OF SCHOOL AND YEAR OF EDUCATION, VICTORIA, 1996

Year of education	Government schools	Non-government(a)			All schools			
		Anglican	Catholic	Other	Total	Males	Females	Persons
Primary								
Preparatory	45 634	889	15 435	3 194	19 518	33 604	31 548	65 152
Year 1	42 579	867	14 552	3 054	18 473	31 581	29 471	61 052
Year 2	44 213	878	14 678	3 148	18 704	32 121	30 796	62 917
Year 3	42 642	942	14 199	3 150	18 291	31 101	29 832	60 933
Year 4	42 485	1 026	14 065	3 315	18 406	31 236	29 655	60 891
Year 5	42 300	1 274	13 933	3 507	18 714	31 229	29 785	61 014
Year 6	41 983	1 351	14 254	3 738	19 343	31 263	30 063	61 326
Ungraded	1 933	—	74	530	604	1 692	845	2 537
Total primary	303 769	7 227	101 190	23 636	132 053	223 827	211 995	435 822
Secondary								
Year 7	38 220	2 800	14 012	5 912	22 724	31 236	29 708	60 944
Year 8	37 738	2 892	13 812	5 810	22 514	31 051	29 201	60 252
Year 9	38 238	3 025	13 207	5 706	21 938	30 474	29 702	60 176
Year 10	36 126	3 153	12 344	5 736	21 233	28 888	28 471	57 359
Year 11	32 338	3 242	11 275	5 612	20 129	25 662	26 805	52 467
Year 12	26 823	2 951	10 158	5 255	18 364	21 031	24 156	45 187
Ungraded	3 810	—	82	356	438	2 590	1 658	4 248
Total secondary	213 293	18 063	74 890	34 387	127 340	170 932	169 701	340 633
Total	517 062	25 290	176 080	58 023	259 393	394 759	381 696	776 455

(a) Includes full-time students attending one special school administered by government authorities other than the Ministry of Education.

Source: *Schools, Australia* (Cat. no. 4221.0).

Higher education

The number of students attending a higher education institution (excluding TAFE) was 175,038 in 1996, an increase of 4% over the previous year. There were 4,552 additional students enrolled in Bachelor degree courses, a 4% increase. The number studying for Higher degree and Post-graduate courses increased by 1,008 (5%) and 1,158 students (7%) respectively.

5.3 HIGHER EDUCATION: NUMBER OF STUDENTS BY LEVEL OF COURSE AND TYPE OF ENROLMENT, VICTORIA, 1996

	Level of course						Total
	Higher degree	Post-graduate	Bachelor	Other	Enabling(a)		
Institute of Higher Education							
University of Ballarat	197	369	3 557	43	—	4 166	
Deakin University	2 079	3 968	20 163	2 022	—	28 232	
La Trobe University	1 948	2 258	16 506	245	18	20 975	
Marcus Oldham Farm Management College	—	—	—	86	—	86	
Monash University	4 872	3 306	30 384	941	13	39 516	
Royal Melbourne Institute of Technology	4 004	2 114	20 377	4	—	26 499	
Swinburne University of Technology	852	1 236	7 685	—	2	9 775	
University of Melbourne	4 772	3 889	21 614	1 212	12	31 499	
Victoria University of Technology	1 158	1 773	10 732	627	—	14 290	
Total higher education	19 882	18 913	131 018	5 180	45	175 038	

(a) An enabling course is a program of study which provides bridging or supplementary education for the purpose of enabling a person to undertake an award course at that institution or at another institution.

Source: *Department of Employment, Education and Training*.

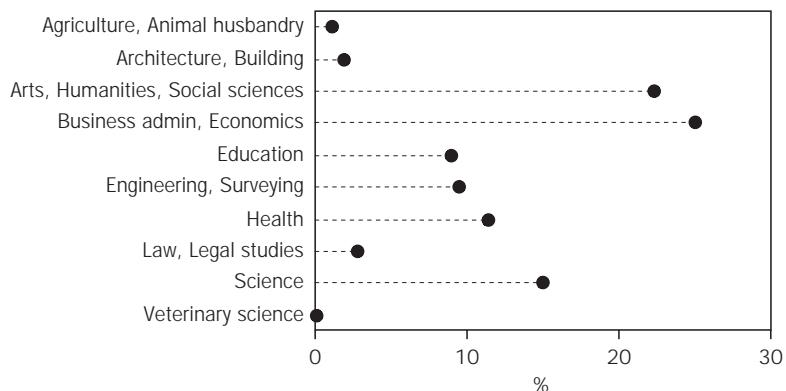
In 1996, the highest proportion of students were enrolled in Business, Administration or Economics (25%) and Arts, Humanities and the Social Sciences (22%). A further 15% of students were studying Science.

Photo:

RMIT

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PERCENTAGE OF STUDENTS(a) BY FIELD OF STUDY, VICTORIA, 1996



(a) Excludes TAFE students.

Source: Dept of Education, Employment and Training

5.4 HIGHER EDUCATION: NUMBER OF STUDENTS BY INSTITUTION AND FIELD OF STUDY, VICTORIA, 1996

Institute of Higher Education	Agriculture, Animal Husbandry	Architecture, Building	Arts, Humanities, Social Sciences	Business, Admin., Economics	Education	Engineering, Surveying
University of Ballarat	—	—	793	786	726	351
Deakin University	—	721	7 378	7 388	4 200	723
La Trobe University	168	—	7 059	3 128	1 925	732
Marcus Oldham Farm Management College	86	—	—	—	—	—
Monash University	—	—	8 283	11 368	2 422	3 904
Royal Melbourne Institute of Technology	—	1 820	3 961	8 422	1 451	4 490
Swinburne University of Technology	—	219	1 963	3 464	—	2 201
University of Melbourne	1 976	941	7 324	4 380	4 773	3 041
Victoria University of Technology	—	60	2 367	4 986	492	1 400
Total higher education	2 230	3 761	39 128	43 922	15 989	16 842

Institute of Higher Education	Health	Law, Legal Studies	Science	Veterinary Science	Non-award courses	Total
University of Ballarat	600	—	870	—	40	4 166
Deakin University	3 000	756	3 752	—	314	28 232
La Trobe University	4 664	434	2 676	—	189	20 975
Marcus Oldham Farm Management College	—	—	—	—	—	86
Monash University	4 098	2 215	6 625	—	601	39 516
Royal Melbourne Institute of Technology	2 729	233	3 393	—	—	26 499
Swinburne University of Technology	—	—	1 928	—	—	9 775
University of Melbourne	2 940	1 410	4 435	279	—	31 499
Victoria University of Technology	2 034	—	2 818	—	133	14 290
Total higher education	20 065	5 048	26 497	279	1 277	175 038

Source: Department of Employment, Education and Training.

TAFE

The number of students enrolled in TAFE (Technical and Further Education) courses in 1996 increased to 677,912, representing a 6% rise over the previous year. TAFE enrolments since 1991 (436,040 students) had increased by 55%.

Enrolments in vocational courses continued to increase, with a rise of 10% from 1995 to 1996. Since 1991, enrolments in vocational courses have increased by almost 90% from 263,796 to 496,324. In comparison, recreational course enrolments have fluctuated widely over the period 1991–1996, reaching a peak of 221,994 in 1992 before decreasing to 181,588 in 1996.

5.5 TAFE: NUMBER OF ENROLMENTS BY MAJOR STREAM GROUP AND SEX, VICTORIA

Year	Males			Females			Persons(a)		
	Vocational(b)	Recreational(c)	Total	Vocational(b)	Recreational(c)	Total	Vocational(b)	Recreational(c)	Total
1991	148 090	35 880	183 970	115 706	136 364	252 070	263 796	172 244	436 040
1992	160 531	41 202	201 733	136 659	180 792	317 451	297 190	221 994	519 184
1993	181 495	35 536	217 031	167 061	166 888	333 949	348 556	202 424	550 980
1994	214 452	37 028	251 480	184 130	164 799	348 929	398 588	201 828	600 416
1995	242 066	34 621	276 687	207 294	154 464	361 758	449 469	189 112	638 581
1996	267 601	35 816	303 417	228 285	145 772	374 057	496 324	181 588	677 912

(a) Includes enrolments for students of unstated sex. (b) TAFE streams 2100 to 4500. (c) Stream 1000, Recreation, leisure and personal enrichment.

Source: Australian National Training Authority.

Almost a quarter of students (22%) in the TAFE vocational stream were studying Business administration and Economics. A further 14% were studying Engineering, Surveying and 21% were enrolled in TAFE multi-field education courses.

5.6 TAFE: NUMBER OF ENROLMENTS IN VOCATIONAL COURSES BY FIELD OF STUDY, VICTORIA, 1996

Field of study	no.	%
Land & Marine Resources, Animal Husbandry	26 862	5.4
Architecture, Building	33 018	6.7
Arts, Humanities & Social Sciences	33 766	6.8
Business Administration, Economics	110 989	22.4
Education	4 846	1.0
Engineering, Surveying	70 219	14.1
Health, Community Services	33 193	6.7
Law, Legal Studies	1 105	0.2
Science	28 082	5.7
Veterinary Science, Animal Care	332	0.1
Services, Hospitality, Transportation	49 191	9.9
TAFE Multi-field Education	104 721	21.1
Total(a)	496 324	100.0

(a) Students may enrol in more than one field of study thus causing the number of students enrolled by field of study to exceed the actual number of students enrolled.

Source: Australian National Training Authority.

Literacy

The Survey of Aspects of Literacy was conducted nationally between May and July 1996. The survey was designed to measure elements of literacy and numeracy skills necessary to use printed material found at work, home, and in the community.

The survey objectively assessed three types of literacy.

Prose:

- Ability to understand and use information from various kinds of prose texts, including texts from newspapers, magazines and brochures.

Document:

- Ability to locate and use information contained in materials such as tables, schedules, charts, graphs and maps.

Quantitative:

- Ability to perform arithmetic operations using numbers contained in printed texts or documents.

The survey defined literacy as a continuum for each of the three types of literacy. Progression along this continuum was characterised by increased ability to 'process' information and to draw correct inferences based on the information being used. To enable analysis, the three types of literacy were divided into five levels, with Level 1 referring to the lowest levels of literacy and Level 5 to the highest.

5.7 PERCENTAGE OF THE POPULATION AT EACH SKILL LEVEL, 1996

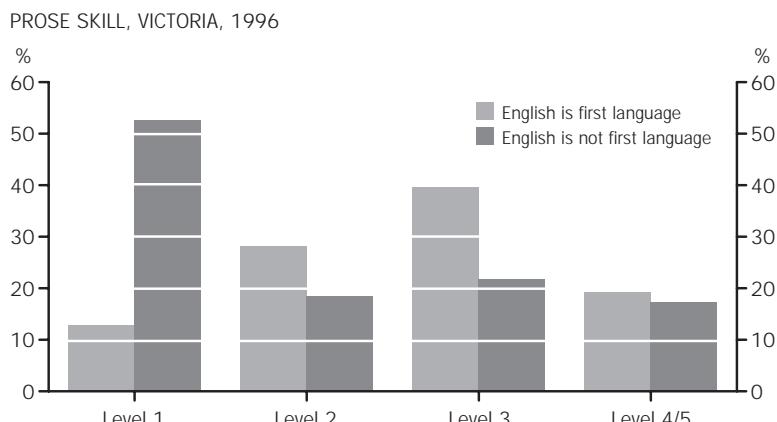
Level	Victoria			Australia		
	Prose	Document	Quantitative	Prose	Document	Quantitative
1	21.7	22.0	21.2	19.7	19.5	19.2
2	26.1	26.3	26.7	27.5	28.3	27.2
3	35.6	35.7	35.2	35.3	36.1	36.0
4/5	16.6	16.0	16.9	17.5	16.1	17.7
Total	100.0	100.0	100.0	100.0	100.0	100.0

Source: *Aspects of Literacy: Assessed Skill Levels, Australia* (Cat. no. 4228.0).

Literacy Skills in Victoria

An estimated 3.3 million Victorians are represented in the results of the survey. The skill level distribution of Victorians was similar on each of the prose, document and quantitative literacy scales. Around 22% of Victorians had very poor skills (Level 1), and could be expected to experience considerable difficulties in using many of the printed materials that may be encountered in daily life. A further 26% were at Level 2, and could be expected to experience some difficulties in using many of the printed materials encountered in daily life. Level 3 was the largest category comprising one-third of Victorians whose skills would enable them to cope with many printed materials found in daily life and at work, though not always with a high level of proficiency. Almost 17% of Victorians were at Levels 4 and 5, representing good to very good skills; people at these levels are considered capable of managing the literacy demands of everyday life.

One characteristic strongly related to English literacy skill level was whether English was the first language spoken. Of the 735,100 people whose first language was not English, around 53% (386,500 people) were at Level 1 for prose literacy skills. In comparison, 13% of people whose first language was English were at Level 1 (prose), representing 335,000 people. Across the literacy categories (prose, document, quantitative), some 19–20% of those whose first language was English were at Level 4/5, compared with 6–7% for those whose first language was not English.



Source: *Aspects of Literacy - unpublished data*.

Educational Attainment

Educational attainment is one of the strongest predictors of literacy, and is sometimes used as a surrogate indicator when objective literacy assessments are not available. In general, greater proportions of people with high literacy skill levels had high levels of educational attainment compared with those at lower skill levels. For example, 61% of Victorians at Level 4/5 on the prose scale had a post-school qualification, compared with 24% of people at Level 1.

There is also a relationship between certain reasons for leaving school early and poor literacy skills. Nationally, similar proportions of people who left school early, for financial or family reasons, were at Level 1 on the prose scale (48% and 49% respectively). In comparison, 35% of those who left school because they were bored with school, did not like school, or did not do well at school, had Level 1 prose skills while 22% of those who left because they wanted to work or learn a trade had prose skills at the same level.

A relationship also exists between people's literacy skills and their parents' education levels. Nationally, greater proportions of people whose mothers had no post-school qualifications had Level 1 and 2 document skills compared with people whose mothers held a qualification (including vocational qualifications), irrespective of their own educational attainment categories.

Work and Literacy

There was a clear relationship between literacy skill level and labour force status. Across the Victorian workforce almost 40% of workers recorded prose skills at Levels 1 and 2, 40% at Level 3 and the remaining 21% at Levels 4/5. A marked contrast was evident in the skill level across different occupation groupings. Almost 51% of Professionals recorded prose skills at Levels 4/5, compared to the average of 21% across all occupation groups. In contrast, Level 1 prose skills were recorded for almost 48% of Plant and machine operators and drivers compared to the average of 14% across all occupations.

5.8 PROSE SKILL LEVEL BY OCCUPATION, VICTORIA, 1996

Occupation	Level				Total '000
	1 %	2 %	3 %	4/5 %	
Managers & administrators	11.0	27.2	45.0	16.8	100.0
Professionals	*2.0	11.7	35.9	50.5	100.0
Para-professionals	*2.3	*18.5	44.5	34.7	100.0
Tradespersons	18.0	36.7	36.1	*9.3	100.0
Clerks	*6.2	24.3	43.8	25.7	100.0
Salespersons & personal service workers	9.4	29.0	43.9	17.7	100.0
Plant & machine operators, & drivers	47.5	22.5	24.3	*5.7	100.0
Labourers & related workers	32.2	25.6	35.5	*6.7	100.0
Total	14.3	25.3	39.5	20.9	100.0
					2 152.3

Source: *Aspects of Literacy—unpublished data*.

ASSISTING TEACHERS AND STUDENTS USE ABS DATA

Almost every student will have the experience of using statistics as part of their course work. They may be required to analyse data provided by their teachers or to seek out statistical material from libraries or the Internet when undertaking projects. In the past decade, the emphasis on sourcing and critically using numbers has steadily grown in most levels and fields of education.

To help meet these expanding statistical needs the ABS has developed a programme to assist teachers, students and other educators. This work is based on the National Education Services unit, located in the ABS Victorian Office. The unit grew out of initiatives commenced in the late 1980s in several ABS State Offices to better promote and distribute ABS products to the school education sector. The unit now offers a range of products and services to all levels of education. These include a yearly catalogue called Statpak, a variety of specialised products designed for aspects of the curriculum, a range of curriculum advice and assistance in accessing data for academic research purposes.

At the beginning of each school year the unit sends the ABS Statpak catalogue to every secondary school throughout Australia. The Statpak refers teachers to ABS resource material relevant to key learning areas — Maths and Information Technology, English and Languages Other Than English (LOTE), Economics and Business Studies, Health and Physical Education, the Arts, Studies of Society and the Environment, and Agriculture and Horticultural Studies. A core of general reference publications is offered, along with a selection of the latest releases most relevant to the curriculum areas. Some State specific publications are also included. The most popular ABS publications purchased through the Statpak in 1997 were those dealing with economic indicators, social trends, environment and sports participation.

As well as assisting teachers and librarians select from the general range of ABS products the National Education Services unit is also involved in producing specialised publications and products designed to support curriculum topics. These include:

- *Australia Working It Out* for Australian Studies
- *Women and Work* for Economics
- *Striking a Balance* for Geography and Environmental Studies

- *Statistics a Powerful Edge* (book and floppy disks) for Mathematics and Information Technology
- *Measuring Australia's Economy* for Economics
- 1996 Census School Resource Kit sent free to all Australian primary schools
- *1996 Year Book Australia* (Developmental multi-media version)
- Australia a Changing Society, a website project undertaken with the Victorian Education Department

Suggestions for such products often arise from consultation and research within the education sector. In its publishing programme the unit aims to meet unmet teaching needs for lively, accurate and relevant statistical materials and to help promote a long-term understanding of how ABS data is used in government and community decision-making.

The unit also assists teachers, university academics, curriculum writers and others identify and access ABS data for curriculum product development, course planning and university research. The unit attends key educational conferences each year to provide advice on new ABS product releases and to gain feedback from the education sector.

An important contribution has been made each year to the unit's work by the Teacher Release to Industry Programme (TRIP) organised by the Victorian Employers' Chamber of Commerce and Industry (VECCI). Each year since 1991 a Victorian school teacher has been placed full-time for 40 weeks at the unit. With their current knowledge and expertise the placements have assisted greatly in ensuring that the unit's work meets current educational needs.

In 1998 and years beyond the ABS will be utilising the Internet more widely in providing information about its products and in actual data dissemination. The National Education Services unit has already established a section on the ABS web site which includes the Statpak catalogue, a "What's New" feature which is updated monthly, a curriculum resources guide by key learning area and other classroom support material. Some 1996 Census data, suitable for teaching purposes, is also now available on the ABS web site. The unit is working to develop the range of education services on the web, including a widening of coverage to TAFE, tertiary and vocational education.

Initiatives are also being taken to meet demands from the education sector for other electronic and multimedia material. In 1998 the ABS will release a Census Keydata Education Toolkit; this is a CD-ROM that will make a wide range of Census data available to education at special prices. Curriculum support materials for the CD-ROM will be maintained on the ABS web site. Preliminary work has also commenced on a multimedia education resource, Australia: Towards the 21st Century. This will be for use by educators in conjunction with the Australian Federation centenary in 2001.

The Statsite address is <http://www.abs.gov.au> and education services pages can be accessed by clicking on the products button on the ABS homepage.

The internet joint project Australia A Changing Society can be accessed from the Victorian Education Department SOFweb site at <http://www.dse.vic.gov.au>.

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Non-ABS sources

Department of Employment, Education and Training

Australian National Training Authority

Chapter 6

Labour

Photo:

Workshop

Delete keylines

OVERVIEW

Labour related statistics are important economic and social indicators. The performance of the economy and the effects of economic policy can be better understood by reference to changes in measures of employment, unemployment, earnings, overtime, job vacancies, and industrial disputes. However labour statistics are also about people. The economic well-being of an individual is largely determined by their employment, as is the social status and privilege they enjoy within the community.

The data in this chapter includes statistics relating to employment, unemployment, underemployment and persons not in the labour force from the monthly labour force survey; average weekly earnings and job vacancies and overtime, which are derived from employer-based surveys; and trade union and industrial disputes data collected mainly from employers.

The labour force

The concept of the labour force is the basis for the measurement of employment and unemployment. The labour force is a measure of the total official supply of labour which is available to the labour market in a given reference week. It is broadly defined as persons aged 15 years and over who are either employed or unemployed in a given reference week. The employed can also be looked at in terms of full-time and part-time status.

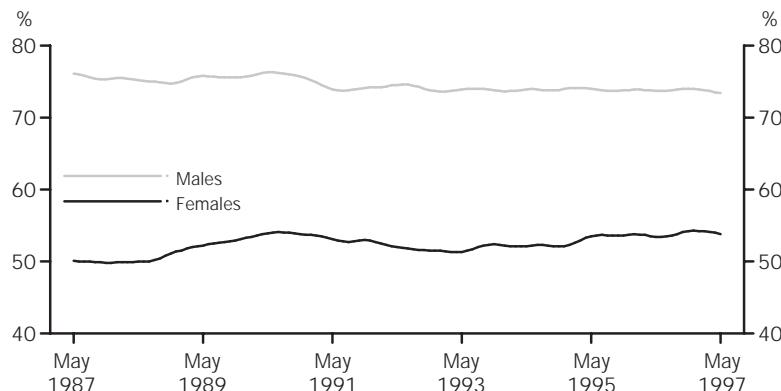
In May 1997 there were 2,299,200 persons in the Victorian labour force of whom 2,090,800 were employed.

Participation rates

The labour force participation rate is the number of persons in the labour force as a percentage of the civilian population of working age, and serves as a measure of those who are participating in economic activity.

In May 1997 the Victorian participation rate was 63.3%. Although the female participation rate has risen over the last 10 years and the participation rate for males has dropped slightly, there remains a significant difference between the participation rates of males and females (73.1% and 53.9% respectively).

PARTICIPATION RATES BY SEX: TREND SERIES, VICTORIA



Source: Labour Force, Victoria (Cat. no. 6202.2).

6.1 LABOUR FORCE STATUS OF THE CIVILIAN POPULATION AGED 15 YEARS AND OVER, VICTORIA

Period	Employed			Unemployed				Not in labour force '000	Civilian population '000	Unemployment rate %	Participation rate %
	Full-time '000	Part-time '000	Total '000	Full-time '000	Total '000	Labour force '000					
MALES											
May											
1982	1 009.7	67.6	1 077.4	51.4	57.7	1 135.1	334.2	1 469.3	5.1	77.3	
1983	967.4	63.3	1 030.6	95.9	102.6	1 133.2	359.4	1 492.6	9.1	75.9	
1984	1 009.7	68.9	1 078.6	72.8	80.2	1 158.8	358.8	1 517.6	6.9	76.4	
1985	1 008.7	70.5	1 079.2	62.3	71.6	1 150.9	393.1	1 544.0	6.2	74.5	
1986	1 040.3	72.9	1 113.2	54.6	61.0	1 174.2	397.1	1 571.2	5.2	74.7	
1987	1 063.4	81.3	1 144.7	63.6	71.6	1 216.3	383.8	1 600.1	5.9	76.0	
1988	1 077.2	81.8	1 159.0	57.6	67.1	1 226.0	402.3	1 628.4	5.5	75.3	
1989	1 118.7	87.7	1 206.4	43.7	50.9	1 257.3	396.4	1 653.7	4.0	76.0	
1990	1 108.8	109.3	1 218.1	52.9	63.2	1 281.3	397.5	1 678.8	4.9	76.3	
1991	1 028.3	99.5	1 127.8	109.9	125.8	1 253.6	443.1	1 696.8	10.0	73.9	
1992	990.7	122.7	1 113.4	144.3	154.9	1 268.3	440.6	1 708.9	12.2	74.2	
1993	990.2	111.1	1 101.3	148.1	166.3	1 267.6	449.4	1 717.0	13.1	73.8	
1994	1 006.4	119.2	1 125.7	131.4	144.3	1 269.9	454.4	1 724.3	11.4	73.6	
1995	1 035.7	130.7	1 166.4	103.6	116.5	1 282.9	454.3	1 737.1	9.1	73.9	
1996	1 057.5	130.4	1 187.9	96.9	109.2	1 297.2	458.6	1 755.8	8.4	73.9	
1997	1 040.9	142.3	1 183.3	101.9	115.7	1 299.0	477.7	1 776.7	8.9	73.1	
FEMALES											
May											
1982	419.6	218.1	637.7	43.8	59.9	697.5	834.8	1 532.3	8.6	45.5	
1983	405.1	222.9	628.0	55.2	74.9	703.0	853.6	1 556.6	10.7	45.2	
1984	416.8	232.8	649.6	46.5	64.4	714.0	867.3	1 581.4	9.0	45.2	
1985	433.3	253.3	686.6	35.9	59.0	745.6	861.7	1 607.2	7.9	46.4	
1986	460.7	278.0	738.7	36.9	62.2	800.8	833.2	1 634.0	7.8	49.0	
1987	478.4	298.8	777.3	39.5	56.4	833.6	828.6	1 662.2	6.8	50.2	
1988	469.2	307.2	776.4	41.1	66.1	842.5	845.7	1 688.2	7.8	49.9	
1989	511.3	336.9	848.2	33.3	57.5	905.8	812.4	1 718.1	6.4	52.7	
1990	538.9	347.9	886.8	31.8	54.8	941.5	803.2	1 744.7	5.8	54.0	
1991	495.5	349.5	845.0	69.2	93.9	938.9	826.7	1 765.5	10.0	53.2	
1992	469.8	345.9	815.6	81.4	104.4	920.1	860.2	1 780.3	11.4	51.7	
1993	478.2	337.8	816.0	77.6	105.4	921.3	868.4	1 789.7	11.4	51.5	
1994	468.2	369.7	838.0	69.9	96.7	934.6	864.1	1 798.7	10.3	52.0	
1995	498.8	393.2	892.0	58.9	80.4	972.4	839.8	1 812.1	8.3	53.7	
1996	516.1	388.2	904.3	56.3	82.3	986.6	845.0	1 831.6	8.3	53.9	
1997	503.7	403.8	907.5	61.9	92.7	1 000.2	854.9	1 855.1	9.3	53.9	
PERSONS											
May											
1982	1 429.3	285.7	1 715.0	95.2	117.6	1 832.6	1 169.0	3 001.6	6.4	61.1	
1983	1 372.5	286.2	1 658.7	151.2	177.5	1 836.2	1 213.0	3 049.2	9.7	60.2	
1984	1 426.5	301.8	1 728.2	119.3	144.6	1 872.8	1 226.2	3 099.0	7.7	60.4	
1985	1 442.1	323.8	1 765.8	98.3	130.6	1 896.4	1 254.8	3 151.2	6.9	60.2	
1986	1 501.0	350.9	1 851.9	91.5	123.1	1 975.0	1 230.3	3 205.3	6.2	61.6	
1987	1 541.8	380.1	1 922.0	103.1	128.0	2 049.9	1 212.4	3 262.3	6.2	62.8	
1988	1 546.4	389.0	1 935.4	98.7	133.1	2 068.5	1 248.1	3 316.6	6.4	62.4	
1989	1 630.0	424.6	2 054.6	77.0	108.4	2 163.0	1 208.8	3 371.8	5.0	64.1	
1990	1 647.6	457.2	2 104.8	84.7	118.0	2 222.8	1 200.7	3 423.5	5.3	64.9	
1991	1 523.9	449.0	1 972.8	179.2	219.6	2 192.5	1 269.8	3 462.3	10.0	63.3	
1992	1 460.5	468.6	1 929.1	225.8	259.4	2 188.4	1 300.7	3 489.2	11.9	62.7	
1993	1 468.4	448.9	1 917.2	225.7	271.7	2 188.9	1 317.8	3 506.8	12.4	62.4	
1994	1 474.7	489.0	1 963.6	201.3	240.9	2 204.6	1 318.5	3 523.0	10.9	62.6	
1995	1 534.4	523.9	2 058.3	162.5	196.9	2 255.2	1 294.0	3 549.3	8.7	63.5	
1996	1 573.6	518.7	2 092.3	153.2	191.5	2 283.8	1 303.6	3 587.4	8.4	63.7	
1997	1 544.6	546.2	2 090.8	163.8	208.4	2 299.2	1 332.6	3 631.8	9.1	63.3	

Source: Labour Force, Victoria (Cat. no. 6202.2)

THE AUSTRALIAN LABOUR FORCE FRAMEWORK

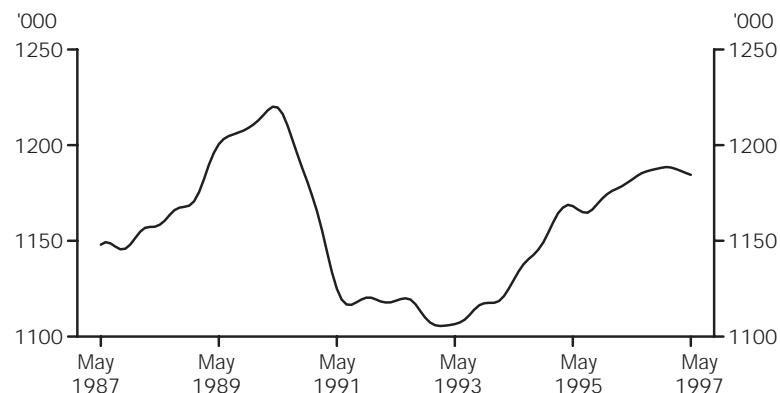


Employment

At May 1997, the number of employed Victorians was estimated to be 2,090,800, a slight decrease over May 1996 but a 9% increase over May 1987, and still below the May 1990 peak of 2,104,800.

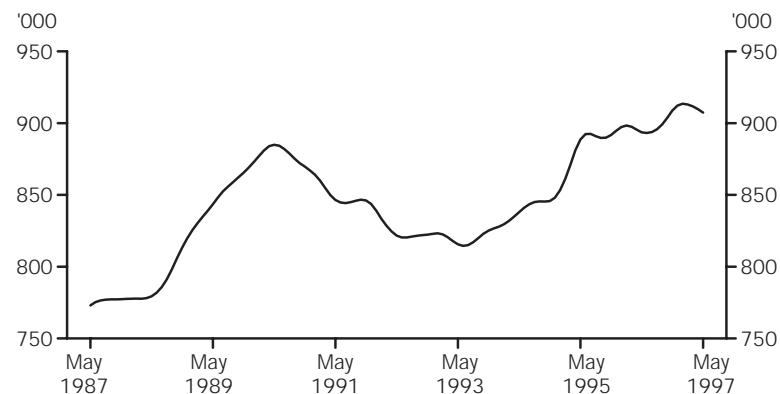
The last decade has seen changes to both the male/female composition of the labour force as well as the proportion of jobs which are full or part-time. While 60% of the employed workforce were male in May 1987, this had decreased to 57% by May 1997. Conversely, female representation increased from 40% to 43% over the same period. A major change has been in the growth of part-time employment, which rose from 20% to 26% of total persons employed over the 10 years to May 1997. Whereas 55% of employed persons in May 1987 were males in full-time work, by May 1997 the corresponding figure stood at 50%. During this period the proportion of the employed workforce who were females working full-time dropped slightly from 25% to 24%, while the number of females in part-time work increased from 15.5% to 19% of the paid workforce.

EMPLOYED MALES: TREND SERIES, VICTORIA

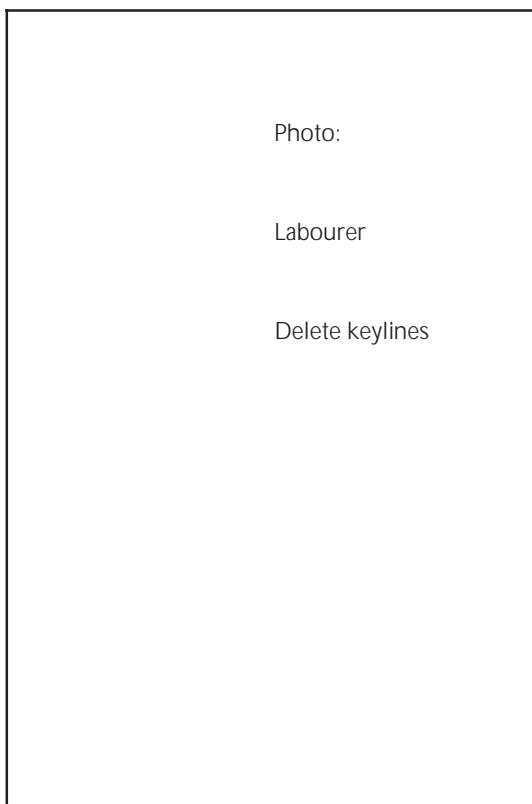


Source: *Labour Force, Victoria* (Cat. no. 6202.2).

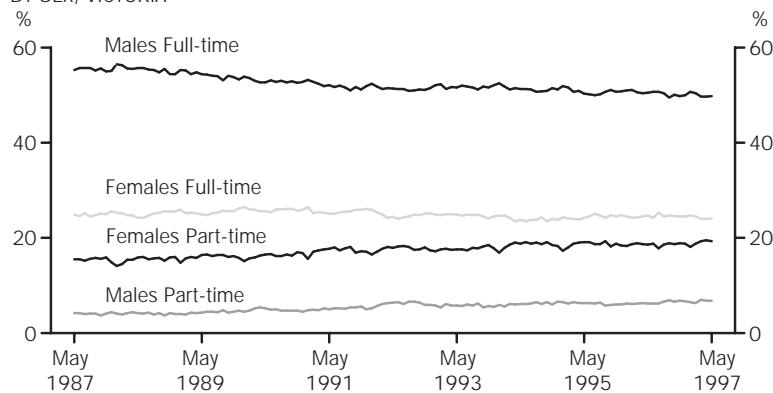
EMPLOYED FEMALES: TREND SERIES, VICTORIA



Source: *Labour Force: Victoria* (Cat. no. 6202.2).



COMPOSITION OF EMPLOYED PERSONS: FULL-TIME/PART-TIME STATUS
BY SEX, VICTORIA



Source: *Labour Force: Victoria* (Cat. no. 6202.2).

Underemployment

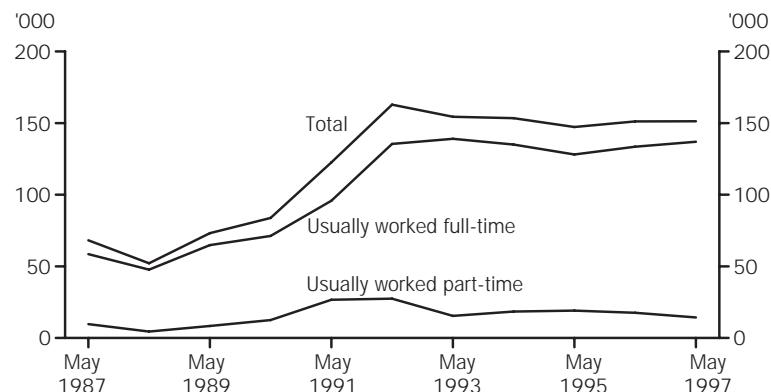
The concept of underemployment embraces two principal forms:

- visible underemployment, involving an insufficient volume of work; and
- invisible underemployment characterised by low income, underutilisation of skills, low productivity and other factors.

The ABS collects information on visible underemployment, with underemployment being defined at the broadest level as employed persons who worked less than 35 hours in the reference week who would have preferred to work extra hours (involuntary part-time workers).

The onset of the recession in 1990 saw a substantial increase in the number of persons who were underemployed. Although this number has decreased since its peak in 1992, the May 1997 figure of 151,200 continues the trend of high underemployment of the last 5 years.

INVOLUNTARY PART-TIME WORKERS, VICTORIA

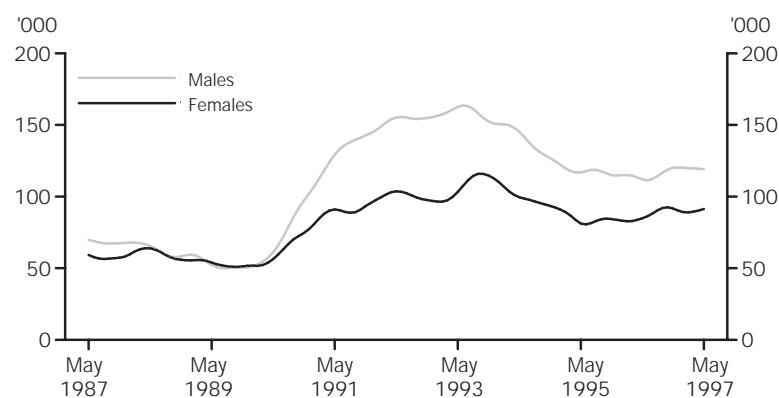


Source: Labour Force, Victoria (unpublished data).

Unemployment

While the previous section on underemployment looked at one part of what is termed 'labour force underutilisation', the other major component of this underutilisation is unemployment. There were an estimated 208,400 unemployed persons in Victoria in May 1997, an increase of 16,900 over May 1996. Of those unemployed in May 1997, 56% were male and 35% of the total were aged 15–24 years.

UNEMPLOYED PERSONS BY SEX: TREND SERIES, VICTORIA



Source: Labour Force: Victoria (Cat. no. 6202.2).

In May 1997, 65,300 persons were unemployed for 52 weeks or longer, of whom 25% were aged 15–24 years and 31% were aged 45 years and over. Although the trend is not consistent, overall as a person's age increases so too does the likelihood that he/she will remain unemployed for longer. Of the unemployed aged 15–19 years, 14% were out of work for 52 weeks or longer, 39% for both 35–44 and 45–54 year olds and 55% for those aged 55 years and over.

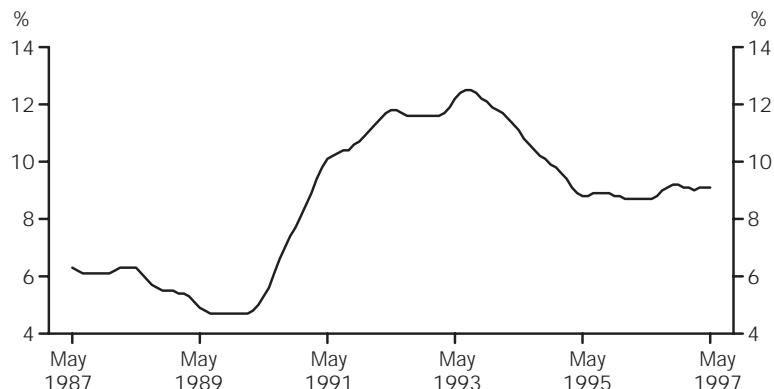
6.2 UNEMPLOYED PERSONS: DURATION OF UNEMPLOYMENT BY AGE, VICTORIA, MAY 1997

Duration of unemployment (weeks)	Age (years)						Total '000
	15-19 '000	20-24 '000	25-34 '000	35-44 '000	45-54 '000	55 and over '000	
Under 13	15.1	15.3	16.8	12.7	9.7	*3.8	73.4
13 and under 52	15.5	11.1	18.3	12.8	8.9	*3.1	69.7
52 and over	5.0	11.0	12.5	16.3	12.0	8.5	65.3
Total	35.5	37.5	47.7	41.8	30.6	15.4	208.4

Source: *Labour Force, Victoria (unpublished data)*.

The unemployment rate is the total number of unemployed persons expressed as a percentage of all those in the labour force. The unemployment rate in Victoria had been showing a steady decline since 1993 but increased from 8.4% in May 1996 to 9.1% in May 1997. The unemployment rate for males rose from 8.4% in May 1996 to 8.9% in May 1997, but was lower than that for females, which rose from 8.3% in May 1996 to 9.3% in May 1997.

UNEMPLOYMENT RATE, TREND SERIES, VICTORIA



Source: *Labour Force: Victoria (Cat. no. 6202.2)*.

Age

Employment and unemployment characteristics vary markedly according to age. Participation rates peak in the age range 20-44 years, reaching 94% for males aged 25-34 years and 78% for females aged 20-24 years. The participation rates of persons in the age groups associated with entering or leaving the labour force are significantly lower; 56% for persons aged 15-19, 59% for 55-59 year olds and 33% for persons aged 60-64 years.

The unemployment rate of 20.2% for persons aged 15-19 years was more than twice the average rate of 9.1%. The lowest unemployment rates were recorded for persons in the 45-54 year age group (6.7%) and the 35-44 and 55-59 year age groups (7.3%).

6.3 LABOUR FORCE STATUS OF THE CIVILIAN POPULATION AGED 15 YEARS AND OVER BY AGE BY SEX, VICTORIA, MAY 1997

Age (years)	Employed			Unemployed			Labour force '000	Not in labour force '000	Unemployment rate %	Participation rate %
	Full-time '000	Part-time '000	Total '000	Full-time '000	Total '000					
MALES										
15-19	26.5	44.8	71.2	10.7	18.3	89.5	72.1	20.4	55.4	
20-24	102.5	25.5	128.0	19.8	21.1	149.2	25.3	14.2	85.5	
25-34	285.8	21.9	307.7	24.9	26.3	334.0	22.2	7.9	93.8	
35-44	286.7	13.5	300.3	19.5	20.3	320.5	24.3	6.3	93.0	
45-54	228.2	10.9	239.1	16.8	17.6	256.7	36.7	6.9	87.5	
55-59	64.6	8.1	72.7	6.5	7.1	79.8	28.9	8.9	73.4	
60-64	33.0	6.4	39.4	*3.5	*4.5	43.9	46.6	*10.2	48.5	
65 and over	13.7	11.1	24.8	*0.2	*0.6	25.4	221.5	*2.4	10.3	
Total	1 040.9	142.3	1 183.3	101.9	115.7	1 299.0	477.7	8.9	73.1	
FEMALES										
15-19	11.8	57.1	69.0	6.6	17.2	86.2	67.5	20.0	56.1	
20-24	75.2	40.9	116.1	13.9	16.4	132.5	37.2	12.3	78.1	
25-34	154.4	78.6	233.0	16.0	21.4	254.4	109.6	8.4	69.9	
35-44	119.4	111.4	230.7	14.9	21.5	252.2	100.2	8.5	71.6	
45-54	110.7	77.7	188.3	8.7	13.0	201.3	91.6	6.4	68.7	
55-59	22.7	21.9	44.6	*1.2	*2.2	46.8	59.6	*4.7	44.0	
60-64	7.5	8.4	15.9	*0.5	*1.1	16.9	74.7	*6.3	18.5	
65 and over	*2.0	8.0	9.9	*0.0	*0.0	9.9	314.6	*0.0	3.1	
Total	503.7	403.8	907.5	61.9	92.7	1 000.2	854.9	9.3	53.9	
PERSONS										
15-19	38.3	101.9	140.2	17.3	35.5	175.7	139.6	20.2	55.7	
20-24	177.7	66.5	244.2	33.6	37.5	281.7	62.5	13.3	81.8	
25-34	440.2	100.5	540.7	40.9	47.7	588.4	131.8	8.1	81.7	
35-44	406.1	124.9	531.0	34.4	41.8	572.8	124.5	7.3	82.1	
45-54	338.9	88.5	427.4	25.5	30.6	458.0	128.2	6.7	78.1	
55-59	87.3	30.0	117.3	7.7	9.3	126.6	88.5	7.3	58.8	
60-64	40.5	14.8	55.3	*4.0	5.6	60.8	121.3	9.1	33.4	
65 and over	15.6	19.1	34.7	*0.2	*0.6	35.3	536.1	*1.7	6.2	
Total	1 544.6	546.2	2 090.8	163.8	208.4	2 299.2	1 332.6	9.1	63.3	

Source: Labour Force, Victoria (Cat. no. 6202.2).

Birthplace

In May 1997, 25% of employed Victorians were born outside Australia. Of the total Victorian labour force, persons born overseas comprised 25.6%. Of persons born overseas and in the labour force, 58.6% were from Europe and 14% were from Southeast Asia. As a group, persons born outside Australia had a higher unemployment rate (11.0%) than the Victorian average (9.1%). The major country group which recorded the lowest rate of unemployment of 8.7% was Europe. Persons born in the UK and Ireland had the lowest unemployment rate considered to be statistically reliable (8.5%) and were a significant contributor to the European figures. The highest unemployment rate was recorded for persons from the major country group, Middle East and North Africa (19.4%), while the country with the highest statistically reliable unemployment rate was Viet Nam (25.7%). Persons who came from a Main English Speaking Country had a much lower unemployment rate (8.7%) and a higher participation rate (64.3%) than persons from Other than Main English Speaking Countries (12.1% and 53.9% respectively).

**6.4 LABOUR FORCE STATUS OF THE CIVILIAN POPULATION(a) AGED 15 YEARS AND OVER,
BORN OUTSIDE AUSTRALIA BY COUNTRY OF BIRTH, VICTORIA, MAY 1997**

Country of birth	Employed			Labour force '000	Not in labour force '000	Civilian population(a) '000	Unem- ployment rate %	Partici- pation rate %
	Full- time '000	Total '000	Unemployed '000					
Oceania								
Oceania	22.3	28.7	*3.5	32.2	8.9	41.1	*10.9	78.3
New Zealand	17.8	23.4	*3.0	26.4	6.8	33.2	*11.3	79.5
Other Oceania	*4.5	5.3	*0.5	5.8	*2.1	7.9	*8.8	73.3
Europe and the former USSR								
Europe and the former USSR	248.5	315.2	30.1	345.3	304.1	649.4	8.7	53.2
Germany	10.9	15.1	*1.1	16.2	14.4	30.6	*6.7	53.0
Greece	21.0	26.2	*2.3	28.5	30.6	59.1	*8.0	48.2
Italy	27.2	33.6	*3.8	37.4	62.6	100.0	*10.1	37.4
Netherlands	12.0	14.5	*1.2	15.8	11.8	27.5	*7.9	57.3
UK and Ireland	97.5	128.6	12.0	140.6	87.2	227.8	8.5	61.7
Former Yugoslav Republics	35.1	40.1	4.8	44.9	33.5	78.4	10.7	57.3
Other Europe	38.6	48.7	*4.2	52.9	52.1	105.0	*7.9	50.4
Former USSR	6.1	8.2	*0.8	9.0	11.8	20.8	*8.7	43.3
Middle East and North Africa								
Middle East and North Africa	20.6	24.3	5.8	30.1	28.0	58.1	19.4	51.8
Lebanon	*3.4	*4.2	*0.5	4.7	5.0	9.7	*11.0	48.8
Other Middle East and North Africa	17.2	20.0	5.3	25.3	23.0	48.4	20.9	52.4
Southeast Asia								
Southeast Asia	56.7	67.7	15.0	82.7	58.7	141.5	18.1	58.5
Malaysia	14.1	17.2	*1.6	18.8	8.2	27.0	*8.4	69.5
Philippines	11.8	14.5	*3.5	17.9	7.2	25.1	*19.3	71.4
Viet Nam	24.1	25.4	8.8	34.2	28.1	62.3	25.7	54.9
Other Southeast Asia	6.8	10.6	*1.1	11.8	15.3	27.1	*9.7	43.6
Northeast Asia								
Northeast Asia	17.9	25.0	*1.5	26.6	19.1	45.6	*5.7	58.2
China	10.8	13.9	*1.0	14.9	11.1	26.1	*6.8	57.2
Other Northeast Asia	7.1	11.1	*0.5	11.6	7.9	19.6	*4.4	59.5
Southern Asia								
Southern Asia	20.4	26.9	*3.4	30.3	15.6	45.9	*11.1	65.9
India	8.4	11.0	*1.0	12.0	5.5	17.5	*8.6	68.6
Other Southern Asia	12.0	15.9	*2.3	18.3	10.1	28.4	*12.8	64.3
Northern America								
Southern and Central America and Caribbean	5.5	7.7	*0.5	8.2	5.0	13.2	*6.3	62.4
Africa (excluding North Africa)	8.7	10.0	*3.5	13.5	4.6	18.1	*25.7	74.5
Africa (excluding North Africa)	15.0	18.7	*1.6	20.3	6.1	26.4	*7.9	76.8
Main English Speaking Countries(b)	124.5	165.5	15.7	181.2	100.8	282.1	8.7	64.3
Other than Main English Speaking Countries	291.0	358.7	49.2	407.8	349.3	757.1	12.1	53.9
Total born outside Australia	415.5	524.2	64.9	589.1	450.1	1 039.1	11.0	56.7

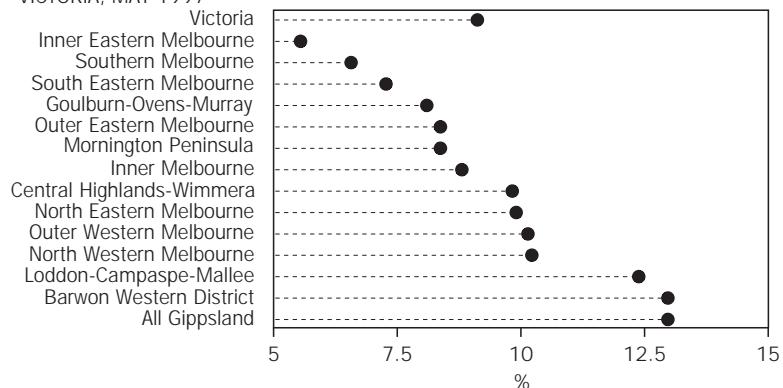
(a) Excludes boarding school pupils and institutionalised persons. (b) Comprises Canada, New Zealand, South Africa, United Kingdom and Ireland, United States of America.

Source: *Labour Force, Victoria* (Cat. no. 6202.2).

Labour force regions

During May 1997, the highest unemployment rates in the Melbourne Major Statistical Region (MSR) were in the North Western Melbourne (10.2%) and Outer Western Melbourne (10.1%) regions. Barwon-Western District (12.9%) and All Gippsland (12.9%) had the highest unemployment rate outside Melbourne MSR. By comparison, Inner Eastern Melbourne (5.6%) and Southern Melbourne (6.6%) had the lowest unemployment rates.

UNEMPLOYMENT RATES: ORIGINAL SERIES, LABOUR FORCE REGIONS, VICTORIA, MAY 1997



Source: *Labour Force, Victoria* (Cat. no. 6202.2).

6.5 LABOUR FORCE STATUS OF THE CIVILIAN POPULATION AGED 15 YEARS AND OVER BY LABOUR FORCE REGION, VICTORIA, MAY 1997

Region	Employed		Unem- ployed '000	Labour force '000	Not in labour force '000	Unem- ployment rate %	Partici- pation rate %
	Full-time '000	Total '000					
Melbourne MSR							
Melbourne MSR	1 169.1	1 549.7	139.9	1 689.6	934.3	8.3	64.4
Outer Western Melbourne	177.6	225.4	25.3	250.7	150.7	10.1	62.5
North Western Melbourne	86.9	109.8	12.5	122.3	80.2	10.2	60.4
Inner Melbourne	89.1	116.1	11.2	127.3	68.5	8.8	65.0
North Eastern Melbourne	156.4	204.0	22.4	226.4	121.5	9.9	65.1
Inner Eastern Melbourne	156.7	220.5	13.1	233.6	114.8	5.6	67.0
Southern Melbourne	131.1	176.4	12.4	188.8	106.0	6.6	64.0
Outer Eastern Melbourne	166.7	225.7	20.6	246.3	119.9	8.4	67.3
South Eastern Melbourne	144.2	183.9	14.4	198.3	99.2	7.3	66.7
Mornington Peninsula	60.3	87.8	8.0	95.8	73.4	8.4	56.6
Balance of Victoria MSR							
Balance of Victoria MSR	375.5	541.1	68.5	609.6	398.3	11.2	60.5
Barwon-Western District	93.3	140.5	20.8	161.4	108.3	12.9	59.8
Central Highlands-Wimmera	64.6	89.1	9.6	98.7	61.0	9.8	61.8
Loddon-Campaspe-Mallee	67.2	91.9	12.9	104.8	86.2	12.3	54.9
Goulburn-Ovens-Murray	87.6	122.7	10.8	133.5	72.0	8.1	65.0
All Gippsland	62.8	96.9	14.3	111.2	70.8	12.9	61.1
Total Victoria	1 544.6	2 090.8	208.4	2 299.2	1 332.6	9.1	63.3

Source: *Labour Force, Victoria* (Cat. no. 6202.2).

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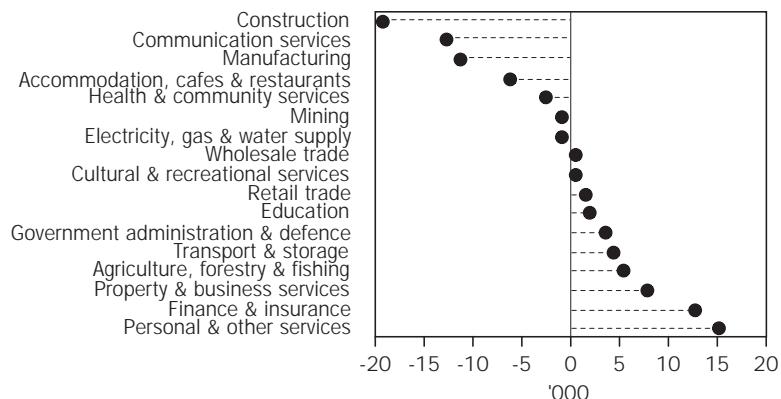
Industry

The major employing industries in Melbourne MSR were Manufacturing (18.1%), Retail trade (14.2%), and Property and business services (11.8%). In the Balance of Victoria MSR the major employing industries were Agriculture, forestry and fishing (16.4%), Retail trade (16.3%), and Manufacturing (12.5%).

The industries to show the greatest decline in total employment in Victoria between May 1996 and May 1997 were Construction, Communication services and Manufacturing with decreases of 19,200, 12,900 and 11,500 respectively.

In contrast, the industries to show the greatest increase in employment were Personal and other services and Finance and insurance which employed 15,000 and 12,700 more persons respectively.

CHANGE IN EMPLOYMENT BY INDUSTRY, VICTORIA, MAY 1996 TO MAY 1997



Source: *Labour Force, Victoria* (Cat. no. 6202.2).

6.6 EMPLOYED PERSONS: INDUSTRY BY MAJOR STATISTICAL REGION (MSR) BY SEX, VICTORIA, MAY 1997

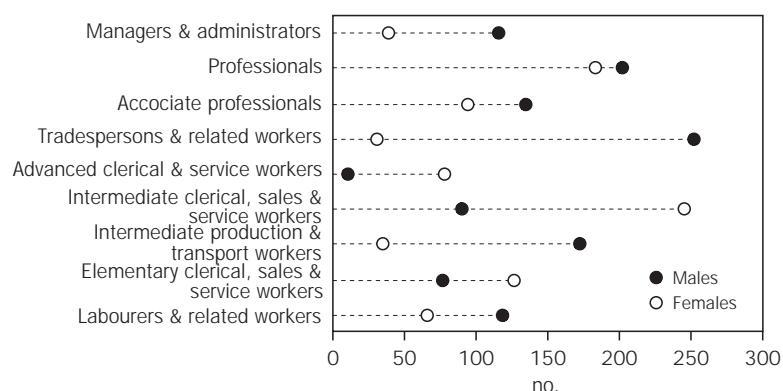
Industry	Melbourne MSR		Balance of Victoria MSR		Total Victoria		
	Males '000	Females '000	Males '000	Females '000	Males '000	Females '000	Persons '000
Agriculture, forestry and fishing	9.0	5.9	61.1	27.3	70.2	33.2	103.4
Mining	*1.1	*0.0	*1.9	*0.0	*3.0	*0.0	*3.0
Manufacturing	201.7	79.3	51.3	16.4	253.0	95.7	348.7
Electricity, gas and water supply	7.3	*1.8	5.1	*0.3	12.4	*2.1	14.5
Construction	80.2	10.6	24.7	*3.5	104.9	14.1	119.0
Wholesale trade	75.6	35.4	16.8	6.0	92.4	41.4	133.8
Retail trade	110.3	110.5	47.2	40.8	157.5	151.3	308.8
Accommodation, cafes and restaurants	26.5	34.0	8.8	16.0	35.2	49.9	85.1
Transport and storage	57.9	18.0	20.4	5.8	78.4	23.9	102.3
Communication services	22.8	12.0	*2.4	*1.9	25.2	14.0	39.1
Finance and insurance	38.2	42.5	5.1	7.3	43.3	49.8	93.1
Property and business services	102.1	81.4	19.3	13.2	121.3	94.6	215.9
Government administration and defence	22.9	32.4	10.4	9.3	33.4	41.7	75.1
Education	33.2	65.2	14.4	23.9	47.6	89.2	136.8
Health and community services	25.9	105.8	9.7	39.3	35.6	145.1	180.7
Cultural and recreational services	16.3	18.1	5.2	*3.8	21.5	21.9	43.4
Personal and other services	36.8	28.9	11.6	10.7	48.4	39.6	88.0
Total all industries	867.7	682.0	315.6	225.5	1 183.3	907.5	2 090.8

Source: Labour Force, Victoria (Cat. no. 6202.2).

Occupation

In Melbourne MSR, the largest occupation groups were Professionals (20.3%); Intermediate clerical sales and service workers (17.2%); and Tradespersons and related workers (13.3%). Outside Melbourne MSR, the largest occupation groups were Tradespersons and related workers (14.6%); Managers and administrators (14.1%); and Professionals (13.5%).

EMPLOYED PERSONS: OCCUPATION BY SEX, VICTORIA, MAY 1997



Source: Labour Force, Victoria (Cat. no. 6202.2).

6.7 EMPLOYED PERSONS: OCCUPATION BY MAJOR STATISTICAL REGION (MSR) BY SEX, VICTORIA, MAY 1997

Occupation	Melbourne MSR		Balance of Victoria MSR		Total Victoria		
	Males '000	Females '000	Males '000	Females '000	Males '000	Females '000	Persons '000
Managers and administrators	62.7	16.9	53.7	22.7	116.4	39.7	156.1
Professionals	167.5	146.6	35.8	37.5	203.3	184.1	387.5
Associate professionals	100.1	73.2	35.5	22.0	135.6	95.2	230.8
Tradespersons and related workers	184.7	21.3	68.6	10.4	253.3	31.7	285.0
Advanced clerical and service workers	9.3	61.6	*2.3	18.1	11.5	79.7	91.2
Intermediate clerical, sales and service workers	74.2	192.9	17.4	53.7	91.6	246.6	338.3
Intermediate production and transport workers	131.0	26.3	43.1	9.5	174.1	35.8	209.9
Elementary clerical, sales and service workers	60.6	95.7	17.3	32.0	77.8	127.7	205.6
Labourers and related workers	77.7	47.5	41.9	19.6	119.5	67.0	186.6
Total all occupations	867.7	682.0	315.6	225.5	1 183.3	907.5	2 090.8

Source: *Labour Force, Victoria* (Cat. no. 6202.2).

Persons not in the labour force

In May 1997, 1,332,600 persons aged 15 years and over were classified as not in the Labour Force. These persons who were neither employed nor unemployed, comprised 37% of the civilian population of Victoria aged 15 years and over. Some 64% of those not in the labour force were female. By comparison, females accounted for 44% of persons in the labour force.

A detailed survey of persons who were not in the labour force was conducted by the ABS in September 1996. The scope of the survey was persons aged 15 to 69 years who were neither employed nor unemployed. Boarding school pupils and persons living in institutions were excluded – they are assumed to be not in the labour force, and to have no current attachment to the labour force.

For Victoria, in September 1996, persons not in the labour force (excluding institutionalised persons and boarding school pupils) numbered 900,000 persons, of whom 600,800 (67%) were female and 299,200 were male.

The most commonly reported main activities whilst not in the labour force for males were 'retired or voluntarily inactive' (34%), 'attending an educational institution' (32%) and 'own illness, injury, disability or handicap' (22%). By comparison, the most commonly reported main activities for females were 'home duties or childcare' (62%), 'attending an educational institution' (15%) and 'retired or voluntarily inactive' (12%).

6.8 PERSONS NOT IN THE LABOUR FORCE(a): MAIN ACTIVITY BY SEX, VICTORIA, SEPTEMBER 1996

Main activity	Males '000	Females '000	Persons '000
Home duties/child care	14.1	370.6	384.6
Attending an educational institution	94.6	91.6	186.2
Retired/voluntarily inactive	101.2	75.1	176.3
Own illness/injury; own disability/handicap	67.0	32.0	98.9
Looking after ill/disabled person	*5.0	15.3	20.3
Travel/moving house	*3.6	*5.0	8.6
Working in unpaid voluntary job	*5.6	8.2	13.8
Other	8.1	*3.1	11.2
Total	299.2	600.8	900.0

(a) Excludes students boarding at school, patients in hospitals and sanatoriums and inmates of reformatories, jails etc.

Source: *Persons Not in the Labour Force, September 1996 (unpublished data)*.

Average weekly earnings

The average weekly earnings (AWE) survey is conducted in February, May, August and November each year and is designed to provide estimates of the level of, and quarter-to-quarter change in, average weekly earnings. The survey is conducted by mail from a sample, of approximately 5,000 employers, designed to ensure adequate State and industry representation.

Trend estimates have been incorporated as they provide a more reliable guide to the underlying direction of the data. For most business decisions and policy advice, they are deemed more suitable than either the seasonally adjusted or original estimates.

As at May 1997 the trend estimate for average weekly ordinary time earnings were \$735.30 for males and \$617.50 for females (adults working full time). Average weekly ordinary time earnings for all adult full-time ordinary time employees was \$693.40.

The annual change to May 1997 was 2.3% for all employees and 4.7% for all adult full-time ordinary time employees.

6.9 AVERAGE WEEKLY EARNINGS OF EMPLOYEES, VICTORIA

Reference period pay period ending on or before	Males			Females			Persons		
	Full-time adults		All males	Full-time adults		All females	Full-time adults		All employees
	Ordinary time earnings \$	Total earnings \$	Ordinary time earnings \$	Total earnings \$	Ordinary time earnings \$	Total earnings \$	Ordinary time earnings \$	Total earnings \$	Total earnings \$
TREND									
1996									
February	694.80	754.50	670.50	585.40	598.40	435.80	658.00	702.00	565.00
May	699.20	761.10	671.90	590.30	603.80	437.60	662.20	707.70	566.70
August	706.20	769.20	675.20	596.40	611.00	441.30	668.70	715.00	570.20
November	716.00	778.20	679.10	603.30	619.00	446.10	677.40	723.70	575.00
1997									
February	725.90	785.90	681.00	610.60	626.90	451.20	685.90	730.90	578.20
May	735.30	792.20	681.00	617.50	634.40	456.30	693.40	736.40	579.70
	%								
Quarterly change to 1996									
1997									
November	1.4	1.2	0.6	1.2	1.3	1.1	1.3	1.2	0.8
February	1.4	1.0	0.3	1.2	1.3	1.2	1.3	1.0	0.6
May	1.3	0.8	0.0	1.1	1.2	1.1	1.1	0.8	0.3
Annual change to May									
1995	4.8	5.1	5.0	4.5	4.3	2.4	4.6	4.8	3.8
1996	3.0	3.5	1.5	3.1	2.9	0.2	3.4	3.8	1.7
1997	5.2	4.1	1.4	4.6	5.1	4.3	4.7	4.1	2.3

Source: Average Weekly Earnings, States and Australia (Cat. no. 6302.0).

Employee Earnings and Hours

In addition to the average weekly earnings statistics obtained from the quarterly survey of employers, statistics on the distribution and composition of average weekly earnings and hours are obtained from a survey of employers conducted biennially in May. This survey provides more detail in terms of industries and sectors as well as information on the composition of earnings and hours for various categories of employees and occupations.

Distribution of earnings varied markedly across occupation groups. The highest average weekly total earnings was recorded for Managers and administrators (\$1,113.80) and Professionals (\$726.60), while the two major occupation groups recording the lowest average weekly total earnings were Elementary clerical, sales and service workers (\$329.20) and Labourers and related workers (\$416.60). Part of the magnitude of the variations in these earnings levels for different occupations is explained by the different proportions of part-time and junior employees represented in these occupation groups.

Significant differences were apparent for male and female weekly total earnings. Across all occupation groups, weekly total earnings of males was higher than for females. The greatest difference occurred among Tradespersons and related persons, where average full-time adult female weekly total earnings was 66% of the male level. In comparison, in the Managers and administrators occupation group, female earnings was 85% of the male level.

6.10 WEEKLY TOTAL EARNINGS(a) BY PERCENTILES, MAY 1996, VICTORIA

	Persons					
	10th percentile	25th percentile	50th percentile	75th percentile	90th percentile	Mean earnings
Managers and administrators	579.10	780.40	1 002.50	1 286.90	1 758.50	1 113.80
Professionals	258.20	520.80	728.60	869.50	1 103.10	726.60
Associate professionals	269.50	433.80	639.10	819.30	1 036.30	655.50
Tradespersons and related workers	293.60	441.10	579.80	753.50	946.10	611.90
Advanced clerical and service workers	200.20	398.10	546.60	670.70	761.30	522.10
Intermediate clerical, sales and service workers	111.20	261.70	464.90	596.60	730.50	446.40
Intermediate production and transport workers	266.10	407.10	527.60	725.10	964.60	579.60
Elementary clerical, sales and service workers	54.10	111.20	313.70	478.00	631.90	329.20
Labourers and related workers	85.40	230.70	415.80	551.60	696.00	416.60
All occupations	150.00	354.50	540.80	756.60	980.20	580.80

Source: *Employee Earnings and Hours unpublished data*.

Wage and salary earners

Information on the monthly number of employees and quarterly earnings for private and public sector employees is collected in the quarterly Survey of Employment and Earnings (SEE). At February 1997, almost 19% of wage and salary earners (315,800 people) were employed in the public sector. The majority were employed in State Government (211,000 people) with 66,700 employed in Commonwealth Government and 38,100 in Local Government. A further 1,390,400 wage and salary earners were employed in the private sector. Over the March quarter 1997, gross earnings of Victorian public and private sector employees totalled \$2,973,100,000 and \$10,179,400,000 respectively.

6.11 WAGE AND SALARY EARNERS AND GROSS EARNINGS, VICTORIA: ORIGINAL

	Employees Feb 1997		Gross Earnings Mar qtr 1997	
	Private '000	Public '000	Private \$m	Public \$m
Agriculture, forestry & fishing	..	0.3	..	2.6
Mining	3.8	..	48.6	..
Manufacturing	333.1	1.2	2 893.8	13.3
Electricity, gas & water supply	5.8	5.4	68.8	66.1
Construction	84.6	3.2	687.5	42.7
Wholesale trade	99.7	..	844.3	..
Retail trade	238.2	..	1 092.4	..
Accommodation, cafes & restaurants	75.4	..	309.9	..
Transport & storage	71.6	11.1	620.5	130.0
Communication services	5.5	34.9	43.2	368.4
Finance & insurance	68.9	1.2	823.9	13.4
Property & business services	176.1	4.3	1 441.6	53.3
Government administration & defence	..	67.8	..	612.4
Education	44.0	89.4	263.5	755.5
Health & community services	104.2	74.6	613.0	657.7
Cultural & recreational services	40.1	4.8	236.1	39.8
Personal & other services	39.4	17.2	192.3	211.1
Total	1 390.4	315.8	10 179.4	2 973.1

Source: *Wage and Salary Earners, Australia* (Cat. no. 6248.0).

Job vacancies and overtime

The Survey of Job Vacancies and Overtime is conducted in February, May, August and November and is designed to collect data from a sample of employers on the number of job vacancies and average overtime hours worked by employees.

Results from the May 1997 survey indicate that, despite a small decrease of 1.1%, job vacancies in Victoria have remained relatively stable over the previous 12 months. New South Wales (-19.8%) was the only other State to record a decrease in job vacancies. A greater number of Victorians are working more hours of overtime on average than are Australians as a whole.

The estimate of job vacancies in May 1997 was 11,500. This represented decreases of 1.1% from the May 1996 figure and 31.1% from the most recent peak of 16,700 job vacancies in February 1996. The number of job vacancies in Victoria over the past 8 years has been quite volatile. The current estimate is 52.3% lower than the peak of 24,100 vacancies in May 1989.

6.12 JOB VACANCIES AND OVERTIME, ORIGINAL SERIES, VICTORIA

Original	Reference Date			Percentage change	
	Nov 1996 '000	Feb 1997 '000	May 1997 '000	Quarterly %	Annual %
Job vacancies					
Private Sector	10.9	*11.1	9.6	-13.3	6.0
Public Sector	1.9	1.7	1.9	6.8	-26.5
Total(a)	12.8	12.8	11.5	-10.6	-1.1
Job vacancy rates—%(b)	0.75	0.75	0.66	-12.6	-2.5
Average weekly overtime hours					
per employee	1.27	1.20	1.26	5.8	9.4
per employee working overtime	7.92	7.59	7.75	2.0	8.7
Percentage of employees working overtime	16.01	15.74	16.32	3.7	0.6

(a) Due to rounding total may not equal sum of components. (b) Job vacancy rate is calculated by expressing the number of job vacancies as a percentage of the number of employees plus vacancies.

Source: *Job Vacancies and Overtime, Australia* (Cat. no. 6354.0).

Trade union membership

Information was collected from trade unions and employee associations as at 30 June 1996. In Victoria, there were 57 trade unions recorded at June 1996, a decline of 4 since 1995 with amalgamations continuing to contribute to the decline in union numbers. Across Australia the number of unions have declined steadily since 1991 when 275 unions were recorded. In Victoria over this 5 year period, the number of unions has decreased by 61.0% compared to the 52.0% decrease experienced across Australia. According to trade union records the total number of union members in Victoria increased by 10,300 in the year to 30 June 1996, while union members as a proportion of total employment remained stable at 38%.

6.13 NUMBER OF TRADE UNIONS AND MEMBERSHIP

	1991	1992	1993	1994	1995	1996
Victoria						
Number of Trade Unions	146	114	89	71	61	57
Total membership ('000)	912.0	827.0	770.6	724.5	669.7	680.0
Percentage of total employees	55.0	51.0	48.0	44.0	38.0	38.0
Australia						
Number of Trade Unions	275	227	188	157	142	132
Total membership ('000)	3 382.6	3 135.1	3 000.1	2 890.2	2 756.3	2 800.5
Percentage of total employees	53.0	49.0	47.0	44.0	40.0	40.0

Source: *Trade Union Statistics, Australia* (Cat. no. 6323.0).

Industrial disputes

The Industrial Disputes Survey collects information on industrial disputes where a stoppage of work has occurred, providing that at least 10 working days have been lost. Information is generally obtained from returns obtained from employers. Particulars of some stoppages, for example State or Australia wide general strikes, may have to be partly estimated.

There were 98 industrial disputes reported in Victoria during 1996. Although this represents a decrease from the 110 disputes in the previous year, the number of employees involved and working days lost increased significantly.

The number of Victorian employees involved in industrial disputes increased by 53%, from 79,000 in 1995 to 121,100 in 1996. This compares with a national increase of 68% for the same period. The number of working days lost in Victoria increased by 73%, from 126,100 in 1995 to 218,100 in 1996.

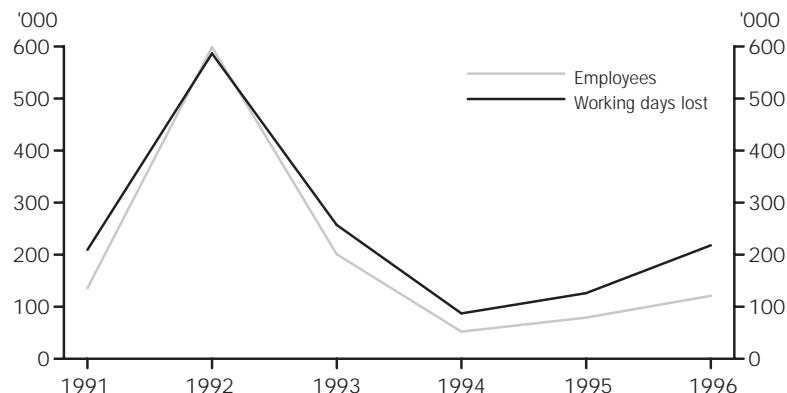
6.14 INDUSTRIAL DISPUTES

Period	Victoria		Australia			
	Total number of disputes	Total employees involved '000	Working days lost '000	Total number of disputes	Total employees involved '000	Working days lost '000
1991	155	135.5	209.2	1 036	1 181.6	1 610.6
1992	114	598.8	586.4	728	871.5	941.2
1993	114	200.9	257.2	610	489.6	635.8
1994	109	52.2	87.0	560	265.1	501.6
1995	110	79.0	126.1	643	344.3	547.6
1996	98	121.1	218.1	543	577.7	928.5

Source: *Industrial Disputes, Australia* (Cat. no. 6322.0)

The highest levels of disputation occurred in the Manufacturing, Construction and Education; Health and community services industries. Combined, these industries accounted for 81% of all Victorian employees involved in disputation and 88% of working days lost.

WORKING DAYS LOST AND EMPLOYEES INVOLVED, VICTORIA, 1991–1996



Source: *Industrial Disputes, Australia* (Cat. no. 6322.0).

Disputation in the Construction industry in Victoria resulted in the loss of 98,500 working days (45%) compared to 65,100 working days lost in the Manufacturing industry (30%) and 28,700 working days lost in the Education; Health and community services industries (13%).

6.15 INDUSTRIAL DISPUTES BY INDUSTRY, VICTORIA, YEAR ENDING DECEMBER 1996

	Employees involved		Working days lost	
	'000	%	'000	%
Agriculture	—	—	—	—
Mining	—	—	—	—
Manufacturing	14.7	12.1	65.1	29.8
Electricity, gas and water supply	0.8	0.7	0.9	0.4
Construction	51.0	42.1	98.5	45.2
Wholesale trade; Retail trade	0.5	0.4	0.5	0.2
Transport and storage	3.0	2.5	4.8	2.2
Communication services	2.0	1.7	0.9	0.4
Finance and insurance; Property and business services	6.8	5.6	4.8	2.2
Government administration and defence	8.7	7.2	11.8	5.4
Education; Health and community services	31.8	26.3	28.7	13.2
Cultural, recreational, personal and other services	1.9	1.6	2.2	1.0
Total	121.1	100.0	218.1	100.0

Source: *Industrial Disputes, Australia* (Cat. no. 6322.0).

The major cause of industrial disputes during 1996 was managerial policy which accounted for 68% of the 218,100 working days lost in disputes which ended during the year. Disputes over Wage rates resulted in 11% of working days lost and a further 18% of working days lost were attributable to Political protests.

REFERENCES

Data sources Currently the ABS' principal sources of labour statistics are household surveys and employer based surveys.

The ABS conducts a monthly household based labour force survey which provides estimates at a national, state and regional level. The major statistical indicators produced from the labour force survey are persons employed and unemployed, classified by age, sex, marital status and country of birth expressed as a proportion of the civilian population aged 15 years and over. However, additional questions to investigate particular aspects of the labour force are frequently included.

The ABS also conducts sample surveys of employers, based on the ABS register of businesses and organisations. Over recent years new or upgraded quarterly surveys of employment and earnings, average weekly earnings, overtime, job vacancies, and an annual survey of employee earnings and hours have been introduced.

The ABS is currently developing a new quarterly Labour Cost Index (LCI). Initial development work has focused on the wage component of the LCI - the Wage Cost Index (WCI). The WCI will be an integrated set of indexes measuring quarterly changes in wage and salary costs for employee jobs. Compilation of the indexes will be based on hourly costs collected for a fixed "basket" of jobs. That is, the indexes will measure changes over time in the cost of a representative sample of employee jobs, not changes in earnings of a representative sample of employees. Hence the quarterly index movements will be unaffected by shifts in occupation and industry distributions, changes in paid hours, and changes for individual employees (e.g. promotions). The full LCI will build on the WCI, incorporating changes in the underlying hourly cost to employers of paid leave, employer funded superannuation, workers' compensation and payroll tax.

Index numbers from the WCI will be released for the first time in the publication *Wage Cost Index, Australia* (Cat. no. 6345.0). The ABS expects to publish the first quarterly movement (September to December quarter 1997) in late March 1998. Index numbers will be published for various combinations of wage and salary costs, and at various levels of disaggregation based on State/Territory, sector (private/public), broad ANSIC industry, and broad ASCO (Second Edition) occupation group. At this stage, a timetable has not been set for the initial release of results from the full LCI.

ABS sources

Victoria's Statistical Geography (Cat. no. 1103.2)

Labour Statistics, Australia (Cat. no. 6101.0)

Labour Force, Australia, Preliminary (Cat. no. 6202.0)

Labour Force, Victoria (Cat. no. 6202.2)

Labour Force, Australia (Cat. no. 6203.0)

Labour Force, Australia, Historical Summary 1978 to 1995 (Cat. no. 6204.0)

Labour Force Experience, Australia (Cat. no. 6206.0)

Labour Mobility, Australia (Cat. no. 6209.0)

Persons Not in the Labour Force, Australia (Cat. no. 6220.0)

Job Search Experience of Unemployed Persons, Australia (Cat. no. 6222.0)

Labour Force Status and Other Characteristics of Families, Australia (Cat. no. 6224.0)

Transition from Education to Work, Australia (Cat. no. 6227.0)

Information Paper: Questionnaires Used in the Labour Force Survey, Australia (Cat. no. 6232.0)

Retirement and Retirement Intentions, Australia (Cat. no. 6238.0)

Career Paths of Persons with Trade Qualifications, Australia (Cat. no. 6243.0)

Successful and Unsuccessful Job Search Experience, Australia (Cat. no. 6245.0)

Employed Wage and Salary Earners, Australia (Cat. no. 6248.0)

Labour Force Status and Other Characteristics of Migrants, Australia (Cat. no. 6250.0)

Career Experience, Australia (Cat. no. 6254.0)

Information Paper: Regional Labour Force Statistics (Cat. no. 6262.0)

Persons Who Had Re-entered the Labour Force, Australia (Cat. no. 6264.0.40.001)

Underemployed Workers, Australia (Cat. no. 6265.0)

Persons Who Have Left the Labour Force, Australia (Cat. no. 6267.0.40.001)

Information Paper: Labour Force Survey Sample Design (Cat. no. 6269.0)

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Participation in Education, Australia (Cat. no. 6272.0)

Persons Employed at Home, Australia (Cat. no. 6275.0)

Career Paths of Qualified Nurses, Australia (Cat. no. 6277.0)

Training and Education Experience, Australia (Cat. no. 6278.0)

Information Paper: Measuring Employment and Unemployment, Australia (Cat. no. 6279.0)

Average Weekly Earnings, States and Australia (Cat. no. 6302.0)

Average Earnings and Hours of Employees, Australia (Cat. no. 6304.0)

Weekly Earnings of Employees (Distribution), Australia (Cat. no. 6310.0.40.001)

Superannuation, Australia (Cat. no. 6319.0)

Industrial Disputes, Australia (Cat. no. 6321.0)

Industrial Disputes, Australia (Cat. no. 6322.0.)

Trade Union Statistics, Australia (Cat. no. 6323.0)

Trade Union Members, Australia (Cat. no. 6325.0)

Employment Benefits, Australia (Cat. no. 6334.0.40.001)

Major Labour Costs, Australia (Cat. no. 6348.0)

Employer Training Expenditure, Australia (Cat. no. 6353.0)

Job Vacancies and Overtime, Australia (Cat. no. 6354.0)

Information Paper: Development of the Employer Training Expenditure Survey (Cat. no. 6355.0)

Chapter 7

Health and Welfare

Photo:

Essendon Hospital

Delete keylines

OVERVIEW

Victoria has a wide range of health services provided by government, non-profit organisations and private enterprise to help safeguard the health and well-being of Victorians and to assist those who are sick.

This chapter provides an overview of health statistics for Victoria. Data is provided on public and private hospitals, children's immunisation, causes of death, the 1995 National Health Survey, Indigenous health, Women's health, Medicare services, Social Security, Veterans Affairs and voluntary work. There are also features on the cost of injury and the Australian Red Cross Blood Service in Victoria.

Causes of death

Statistics on causes of death, numbers of inpatients in hospitals, psychiatric units and nursing homes and details of conditions treated and operations performed are important indicators that assist in analysing the health needs of the Victorian population.

The main cause of death for Victorian residents in 1996 was 'diseases of the circulatory system' (including heart attack and stroke), followed by cancer (malignant neoplasms). Diseases of the circulatory system accounted for 38% of male and 44% of female deaths and were the main cause of death for both males and females aged 65 years and over. The most common cause of death under this broad category was ischaemic heart disease, which accounted for 23% of all male and 22% of all female deaths. Cancer accounted for 30% of male and 26% of female deaths.

The number of deaths due to cancer (which is included in the category of neoplasms) increased marginally to 9,200 deaths in 1996. Cancer was the major cause of death for males aged between 45 and 64 years, and for females aged between 25 and 64 years. The most common types were lung cancer for males and breast cancer for females.

Accidents, poisonings and violence were responsible for 5% of the total deaths in 1996, and were the major causes of male deaths in the age groups 1 to 44 years, and female deaths in the age groups 1 to 24 years.

In 1996, as in 1995, the total number of suicides exceeded motor vehicle traffic accidents thus making suicide the major external cause of death. The total number of suicides fell by 12% to 500 in 1996, whilst motor vehicle traffic accidents increased by 6% to 410. Suicide was the major cause of death for males aged between 25 and 44 years, whilst motor vehicle accidents was the predominant cause for both males and females in the 15 to 24 year age group.

The number of AIDS-related deaths in Victoria in 1996 were 128 males and 6 females, compared with 139 males and 15 females in 1995.

7.1 CAUSES OF DEATH: NUMBERS AND RATES, VICTORIA, 1996

Cause of death (a)	Number of deaths	Proportion of total	Rate (b)
Infectious and parasitic diseases (001–139)	395	1.2	87
Neoplasms (140–239)	9 200	28.1	2 017
Endocrine, nutritional and metabolic diseases, and immunity disorders (240–279)	1 261	3.9	276
Diseases of the blood and blood-forming organs (280–289)	121	0.4	27
Mental disorders (290–319)	954	2.9	209
Diseases of the nervous system and sense organs (320–389)	796	2.4	175
Diseases of the circulatory system (390–459)	13 492	41.2	2 958
Diseases of the respiratory system (460–519)	2 631	8.0	577
Diseases of the digestive system (520–579)	957	2.9	210
Diseases of the genito-urinary system (580–629)	591	1.8	130
Complications of pregnancy, childbirth, and the puerperium (630–676)	0	—	—
Diseases of the skin and subcutaneous tissue (680–709)	38	0.1	8
Diseases of the musculoskeletal system and connective tissue (710–739)	227	0.7	50
Congenital anomalies (740–759)	166	0.5	36
Certain conditions originating in the perinatal period (760–779)	139	0.4	30
Signs, symptoms, and ill-defined conditions (780–799)	102	0.3	22
Accidents, poisonings, and violence (external causes) (800–999)	1 656	5.1	363
Total	32 726	100.0	7 175

(a) The classification used is the International Classification of Diseases, Ninth Revision (ICD-9 CM), aggregated at the class level.

(b) Per 1,000,000 mean population.

Source: *Causes of Death, Australia* (3303.0).

7.2 MAIN CAUSES OF DEATH IN AGE GROUPS, VICTORIA, 1996

Cause of death	Deaths from specified cause		
	In age group no.	% ^(a)	At all ages no.
UNDER 1 YEAR			
Certain conditions originating in the perinatal period (760-779)	137	44.5	139
Congenital anomalies (740-759)	100	32.5	166
Signs, symptoms, and ill-defined conditions (780-799)	36	11.7	102
1-14 YEARS			
Other external accidents (excluding motor vehicle accidents and suicides) (800-807, 820-949, 960-999)	32	19.8	746
Malignant neoplasms (140-208)	30	18.5	9 060
Motor vehicle traffic accidents (810-819)	26	16.0	410
Congenital anomalies (740-759)	21	13.0	166
15-24 YEARS			
Motor vehicle traffic accidents (810-819)	120	29.1	410
Other external accidents (excluding motor vehicle accidents and suicides) (800-807, 820-949, 960-999)	97	23.5	746
Suicide and self-inflicted injury (950-959)	78	18.9	500
Malignant neoplasms (140-208)	27	6.6	9 060
25-44 YEARS			
Malignant neoplasms (140-208)	352	25.2	9 060
Suicide and self-inflicted injury (950-959)	231	16.5	500
Other external accidents (excluding motor vehicle accidents and suicides) (800-807, 820-949, 960-999)	207	14.8	746
Diseases of the circulatory system (390-459)	175	12.5	13 492
45-54 YEARS			
Malignant neoplasms (140-208)	633	44.3	9 060
Ischaemic heart disease (410-414)	223	15.6	7 284
Cerebrovascular disease (430-438)	88	6.2	3 136
Suicide and self-inflicted injury (950-959)	65	4.6	500
55-64 YEARS			
Malignant neoplasms (140-208)	1 413	47.8	9 060
Ischaemic heart disease (410-414)	539	18.2	7 284
Diseases of the respiratory system (460-519)	157	5.3	2 631
Endocrine, nutritional and metabolic diseases and immunity disorders (240-279)	127	4.3	1 261
65-74 YEARS			
Malignant neoplasms (140-208)	2 835	40.4	9 060
Ischaemic heart disease (410-414)	1 587	22.6	7 284
Diseases of the respiratory system (460-519)	608	8.7	2 631
Cerebrovascular disease (430-438)	462	6.6	3 136
75 YEARS AND OVER			
Ischaemic heart disease (410-414)	4 845	25.4	7 284
Malignant neoplasms (140-208)	3 767	19.8	9 060
Cerebrovascular disease (430-438)	2 426	12.7	3 136
Diseases of the respiratory system (460-519)	1 785	9.4	2 631

(a) Deaths in this age group from the stated cause expressed as a percentage of all deaths in the age group.

Source: ABS *unpublished data*.

Acute health

Total expenditure for the 91 Victorian public hospitals in 1995-96 was \$3,456 million. Wages and salaries (\$1,933 million) was the largest expenditure item, comprising 56% of total Victorian expenditure. Average expenditure per occupied bed day was \$933 and per separation was \$3,962. Total revenue for Victorian public hospitals was \$3,412 million of which 81% was derived from Government grants (including Commonwealth and state indirect contributions).

In 1995–96, Victoria's public hospitals treated a total of 872,312 patients, with each separation having an average length of stay of 4 days. Females accounted for 54% of all cases treated in Victorian public hospitals.

The most treated condition related to diseases and disorders of the Kidney and urinary tract, which accounted for 108,783 separations or 12% of the total. This was followed by diseases and disorders of the Digestive system, which accounted for 95,319 separations (11%), and Pregnancies and childbirth 83,633 separations (9%).

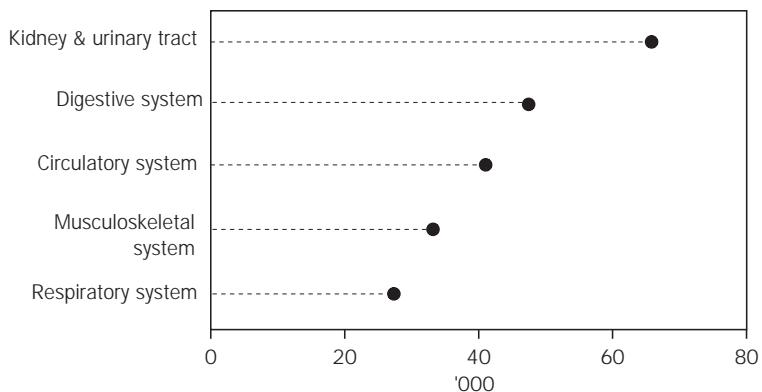
Mental diseases and disorders represented the highest average length of stay, with each case involving a 13 day stay in hospital on average. In contrast, the average for cases relating to Eyes, Ears, nose, mouth and throat and to Kidney and urinary tract conditions was under 2 days.

7.3 SEPARATIONS AND AVERAGE LENGTH OF STAY BY MAJOR DIAGNOSTIC CATEGORY AND SEX, VICTORIAN PUBLIC HOSPITALS, 1995–96

Major medical condition	Males		Females		Total	
	Separations	Average length of stay	Separations	Average length of stay	Separations	Average length of stay
Alcohol/drug use & alcohol/drug induced organic mental disorders	1 890	5.61	808	4.89	2 698	5.39
Burns	714	7.74	303	6.88	1 017	7.49
Blood & blood forming organs & immunological disorders	7 798	2.20	7 016	2.41	14 814	2.30
Circulatory system	41 064	4.98	31 761	5.17	72 825	5.06
Digestive system	48 083	2.91	47 236	2.99	95 319	2.95
Ear, nose, mouth & throat	23 091	1.83	19 308	1.74	42 399	1.79
Eye	8 727	1.64	9 861	1.55	18 588	1.59
Female reproductive system	—	—	40 932	2.23	40 932	2.23
Hepatobiliary system & pancreas	7 359	5.39	9 744	4.61	17 103	4.95
Kidney & urinary tract	66 206	1.60	42 577	1.85	108 783	1.70
Male reproductive system	15 492	2.64	—	—	15 493	2.65
Musculoskeletal system & connective tissue	33 643	4.32	32 456	5.73	66 099	5.01
Nervous system	20 878	6.33	18 901	6.93	39 779	6.62
Respiratory system	28 006	5.41	22 061	5.85	50 067	5.60
Skin, subcutaneous tissue & breast	15 622	3.49	20 706	3.81	36 328	3.67
Endocrine, nutritional & metabolic diseases & disorders	5 138	5.34	6 854	6.05	11 992	5.75
Factors influencing health status & other contacts with health services	20 169	9.17	22 070	11.82	42 239	10.55
Infectious & parasitic diseases (systemic or unspecified sites)	6 906	5.82	4 326	5.67	11 232	5.76
Injuries, poisonings & toxic effects of drugs	8 696	3.44	8 889	3.04	17 585	3.24
Mental diseases & disorders	9 778	13.05	11 643	13.50	21 421	13.29
Myeloproliferative diseases & disorders & poorly differentiated neoplasms	24 358	2.25	20 029	2.21	44 387	2.23
Newborns & other neonates with conditions originating in the perinatal period	26 553	5.09	24 192	4.93	50 787	5.01
Pregnancy, childbirth & the puerperium	—	—	83 633	3.33	83 633	3.33
Total	420 171	4.06	485 307	4.27	905 520	4.17

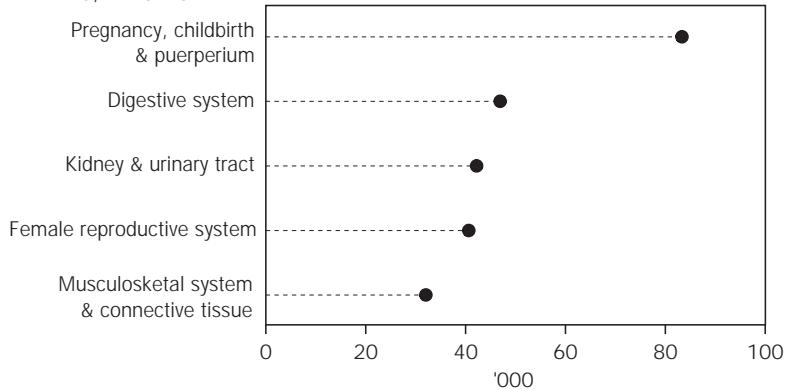
Source: Department of Human Services, Victoria.

SEPARATIONS BY MAJOR DIAGNOSTIC CONDITION, VICTORIAN PUBLIC HOSPITALS,
MALES, 1995-96



Source: Dept of Human Services, Victoria.

SEPARATIONS BY MAJOR DIAGNOSTIC CONDITION, VICTORIAN PUBLIC HOSPITALS,
FEMALES, 1995-96



Source: Dept of Human Services, Victoria.

The profile for the conditions of men and women in the public hospital system was quite different. The most commonly treated conditions for men were diseases and disorders of the Kidney and urinary tract (66,206 separations), the Digestive system (48,083 separations) and the Circulatory system (41,064 separations). For women, the most commonly treated conditions were Pregnancy and childbirth (83,633 separations), diseases and disorders of the Digestive system (47,236 separations) and the Female reproductive system (40,932 separations).

Staffing and administration

In 1995-96, there were 42,274 effective full time (EFT) staff in Victorian public hospitals. This is a small increase of 1.5% from the 41,643 EFT in 1994-95. Of these staff, nurses numbered 18,471 (43.7%) , hotel staff, involved in the general running of the hospitals (orderlies, cleaners, caterers, laundry workers, etc), accounted for 8,170 (19.3%) and 3,298 (7.7%) were resident, salaried or sessional medical staff.

Staffing levels in Public Hospitals in 1995–96 were affected by Mental Health Services staff transferring to the public hospital payroll throughout the year, 215 day hospital staff transferring from Community Health to Aged Care Centres and staff at the Heidelberg Repatriation Hospital moving to the public hospital payroll 1 January 1995.

7.4 STAFF(a) IN PUBLIC HOSPITALS

Position	1994–95 no.	1995–96 no.
Nurse	18 558	18 471
Administration	5 924	6 217
Medical support	5 612	6 118
Hotel(b)	8 437	8 170
Hospital medical officers	1 911	2 066
Salaried medical staff	638	675
Sessional medical staff	562	557
Total	41 643	42 274

(a) Effective full-time units. (b) Includes cleaning and catering staff.

Source: *Dept of Human Services, Victoria*.

Private hospitals

In Victoria in 1995–96 there were 99 private acute hospitals, 5 private psychiatric hospitals and 23 day hospital facilities. Day hospital facilities provide investigation and treatment for acute conditions on a day-only basis.

7.5 PRIVATE HOSPITALS BY TYPE AND SIZE, VICTORIA AND AUSTRALIA, 1995–96

Hospitals	Victoria		Australia	
	no.	%	no.	%
Acute	99	95.2	299	92.6
Psychiatric	5	4.8	24	7.4
Hospital size(a)				
0–25 beds	33	31.7	67	20.7
26–50	30	28.8	92	28.5
51–100	24	23.1	102	31.6
101–200	13	12.5	46	14.0
Over 200	4	3.8	16	5.0
Total acute and psychiatric	104	100.0	323	100.0

(a) Based on available beds (average for year).

Source: *Private Hospitals, Australia* (4390.0).

There were 389,900 separations in Victorian private hospitals in 1995–96, accounting for 1,603,900 occupied bed days. This represented 26.8% and 27.4% respectively of the Australian total. The Victorian occupancy rate was 71.4% and the average length of stay was 4.1 days, compared with the Australian average of 4.0 days.

In Victoria there were 10,952 full-time equivalent staff employed (over the 1995–96 year) in private acute and psychiatric hospitals. This number represented 28% of the Australian full-time equivalent staff employed total. In Victoria, 57% of employed staff comprised nursing staff. The average number of staff per occupied bed was 2.5, slightly above the national figure of 2.4.

Total recurrent expenditure in Victorian private hospitals amounted to \$814.7 million. Gross capital expenditure was \$95.9 million. Wages and salaries, \$493.3 million, was the largest recurrent expenditure item, comprising 60.5% of total Victorian expenditure. Average expenditure per occupied bed day was \$508 and per separation was \$2,089. This compared with the Australian average of \$483 and \$1,944 respectively. Total revenue for Victoria was \$875.1 million, of which 94.5% was patient revenue.

COST OF INJURY

Injury has been identified as a major public health problem in Australia and internationally. It is still the major cause of death and disability in young people and the potential life years lost to age 70 from injury exceed those of cancer and heart disease combined.

Although injury accounted for only 5.7% of all deaths in Australia in 1994 it is the leading cause of death of persons aged between 1 and 44 years, accounting for 38% of deaths in children (1–14 years) and 72% of deaths in the 15–24 year old age group. It is also the single leading cause of inpatient hospital episodes in Australia.

The largest number of injuries, for each level of severity, is for males. Almost three quarters (72.5%) of injury deaths and over three fifths (61.5%) of non fatal injuries occur among males.

7.6 NUMBER OF INJURED PERSONS BY SEX AND SEVERITY, VICTORIA, 1993–94

	Fatalities no.	Hospitalised no.	Non-hospitalised no.	Total no.
Males	1 078	38 839	246 825	286 742
Females	409	28 563	150 335	179 307
Persons	1 487	67 042	397 160	466 049

In 1993–94 injuries resulted in at least 1,487 deaths (with an estimated 142 deaths occurring in later years as a result of injuries sustained in that year), 67,042 persons hospitalised and an estimated 397,160 medically treated non-hospitalised injured persons. In total over 466,000 persons were injured or 10.5 persons injured per year for every 100 Victorian residents.

Just over 40% of all injury deaths involve intentional injuries. Of the intentional injury deaths that occurred in 1993–94 in Victoria 88.5% were suicides (527) and 9.5% were homicides (57). The remaining 60% of injury deaths were due to unintentional causes, mainly motor vehicles (49%) and falls (21%).

The total lifetime cost of injury sustained in 1993–94, in Victoria, is \$2,583 million, consisting of direct costs of \$759 million, plus indirect costs (estimated using the human capital method and including mortality costs) of \$813 million and morbidity costs of \$1,010 million. The human capital approach is the most commonly used method for valuing the foregone productivity, or indirect cost, of illness or injury. The human capital approach values people in terms of their production, and equates the value of life with the net present value of expected future earnings. An individual is seen as producing over time a stream of output valued at market earnings or by the imputed worth of housekeeping services.

7.7 LIFETIME COST OF AN INJURY BY SEX AND LEVEL OF INJURY SEVERITY, VICTORIA, 1993–94

	Cost				Cost per injured person			
	Fatalities \$m	Hospitalised \$m	Non-hospitalised \$m	Total \$m	Fatalities \$	Hospitalised \$	Non-hospitalised \$	Total \$
Males	611.9	798.3	225.0	1 635.2	521 680	20 554	912	5 701
Females	212.8	590.8	144.1	947.7	466 619	20 684	959	5 284
Persons	824.7	1 389.1	369.2	2 582.9	502 267	20 609	929	5 541

Most major injuries occur in the home with 35.9% of all injuries being sustained in a private residential setting. Injuries that occur in areas of transport are the next most prevalent at 11.7% followed by Educational 8.3%, Commerce 7.2% and Sport 6.6%.

Source: Watson, Wendy L. & Ozanne-Smith, Joan. (1997). The cost of injury to Victoria. Monash University Accident Research Centre Report No. 124.

Mental health services

In recent years the State Government's emphasis on provision of mental health services has changed from a reliance on separate psychiatric hospitals to an increased focus on community-based care. Community-based care involves the provision of specialised services and the integration of mental health care with existing types of health and community care.

In Victoria, in the three years to June 1996, this was reflected in a reduction in the number of beds in stand-alone psychiatric hospitals, an increase in the number of psychiatric beds in general hospitals and an increase in the provision of community-based services.

There were 1,508 psychiatric beds available in the Victorian public health system at June 1996. In the three years to June 1996, the number of beds in stand-alone psychiatric hospitals had fallen to 1,180 beds. Over the same period, an additional 31 beds were provided in psychiatric units in general hospitals. Of the net reduction, most occurred in the provision of non-acute psychiatric beds with a decrease of 327 compared to a decrease of 27 in acute beds. Spending on stand-alone hospitals was reduced by \$37.6 million over the same period.

Victorian Government spending on community-based mental health services increased by \$38 million (37%) in the three years to June 1996. In 1995-96 community based services received 44% of the \$322.7 million spent on mental health services. These services include: ambulatory services such as outpatient clinics, mobile assessment and treatment teams, and day programs; specialised residential services; and services provided by not-for-profit non-government organisations which may include accommodation, recreation, rehabilitation, social support and advocacy programs.

During 1995-96, in the 7 private psychiatric hospitals operating in Victoria there were 339 psychiatric beds available. A further 11 private hospitals operated specialised psychiatric units or wards within the State. The average length of stay for patients admitted to private hospitals with psychiatric conditions in Victoria was 9.5 days.

INFECTIOUS DISEASES

Infectious diseases

A vital aspect of health care is the prevention and containment of disease. As more becomes known about the factors which contribute to the incidence of specific diseases it becomes possible to prevent diseases or detect and treat them at earlier stages with improved chances of success.

An important element in containing the spread of disease is the surveillance of infectious diseases. These diseases, which were the main cause of sickness and death in the nineteenth century, have been largely brought under control in the twentieth century through improvements in living standards and medical advances such as immunisation and antibiotics. However, factors related to large population movements, the natural environment and the increasing ease of travel can all contribute to the spread of infection from overseas and within Australia.

In order to monitor the incidence and spread of infectious diseases, medical workers involved in the diagnosis of disease are required to notify the Infectious Diseases Unit of the Department of Human Services of any new occurrences of specified diseases. In particular, four types of infectious diseases pose problems for the community, vaccine preventable diseases, hospital acquired infections, blood-borne viral infections and enteric infections.

7.8 NOTIFICATIONS OF SELECTED INFECTIOUS DISEASES, VICTORIA

	1995		1996		
	1991 no.	no.	rate(a)	no.	rate(a)
Food and water-borne diseases					
Campylobacter infections	2 466	2 964	66.2	3 453	77.1
Giardiasis (Giardia)	913	985	21.9	1 102	24.3
Hepatitis A	496	257	5.7	454	10.0
Salmonellosis (Salmonella)	932	971	21.7	915	20.1
Listeriosis	26	23	0.5	20	0.4
Typhoid	21	13	0.3	15	0.3
Other diseases					
AIDS	190	143	3.9	129	2.8
Barmah Forest Virus(b)	n.a	7	0.2	43	0.9
Haemophilus influenza type b (Hib)	270	26	0.6	13	0.3
Hepatitis B					
Acute	84	93	2.1	88	2.0
Prevalent	1 708	1 900	42.4	2 069	46.2
Hepatitis C	1 735	4 513	100.7	4 544	101.5
HIV	311	173	3.9	195	4.3
Legionellosis (Legionnaires' Disease)	20	22	0.5	36	0.8
Leptospirosis	88	70	1.6	61	1.3
Malaria	111	119	2.7	109	2.5
Measles	448	150	3.4	96	2.1
Meningococcal infection	82	75	1.7	93	2.1
Mumps	49	77	1.7	50	1.1
Pertussis (Whooping cough)	71	393	8.9	1 344	29.6
Q Fever	39	62	1.4	63	1.4
Ross River Virus	404	32	0.7	147	3.2
Rubella	181	1 292	28.8	672	15.0
Shigellosis	86	83	1.8	74	1.7
Tetanus	0	4	0.1	1	0.0
Tuberculosis	244	286	6.4	288	6.4
Typhus	0	6	0.1	9	0.2
Sexually transmitted diseases(c)					
Gonorrhoea	337	341	9.6	397	8.7
Syphilis	100	264	5.9	101	2.2
Chlamydia	832	1 317	29.4	1 611	35.5

(a) Notifications per 100,000 population. (b) Testing was not available in 1991. (c) Rate quoted is for population over 15 years of age.

Source: Dept of Human Services, Victoria.

Blood-borne and sexually transmitted infections

Blood-borne viral infections, such as HIV, Hepatitis B and Hepatitis C are spread by sexual transmission and other exchange of body fluids, such as through intravenous drug use. In Victoria, these infections are being largely contained by a combination of epidemiological surveillance and contact tracing, educational programs and monitoring of blood donors and donated blood.

A total of 3,727 people have been diagnosed with Human Immunodeficiency Virus (HIV) in Victoria to date when there has been a steady decline in the number of new HIV cases diagnosed since 1991. In 1996, 195 people were newly diagnosed with HIV, compared with 311 in 1991. A significant reduction in the number of homosexual men diagnosed with HIV contributed to this decrease. In total, Acquired Immune Deficiency Syndrome (AIDS) has been diagnosed in 1,601 people in Victoria, of whom 1,244 people have died. The number of new AIDS cases diagnosed fell from 190 cases in 1991 to 129 cases in 1996.

Of other sexually transmitted diseases diagnosed in 1996, Syphilis accounted for 101 cases, Gonorrhoea 397 and Chlamydia 1,611. In the treatment of gonorrhoea, an increase in the level of resistance to traditional antibiotics is an area of concern. A significant number of antibiotic resistant strains were contracted overseas, highlighting the need for an ongoing campaign to warn travellers of the risks of acquiring sexually transmitted diseases when overseas.

Food and water-borne infections

Food and water borne diseases can result in intestinal illness generally described as food poisoning. The organisms which most commonly cause these types of illnesses are the campylobacter and salmonella organisms. Listeriosis, although affecting a small number of people can cause serious illness. Groups most at risk are pregnant women and their babies, the elderly and people with lowered immunity. Infection with *Giardia lamblia* is also a commonly reported intestinal illness, although it may often be water rather than food-borne.

Immunisation

There is growing concern that vaccine preventable diseases, such as whooping cough and measles, which have been controlled in the past, could return if immunisation rates are not effectively maintained.

A public immunisation program, commenced in August 1993, has led to the reduction in the incidence of serious *Haemophilus influenza* type b (Hib), which mainly affects children under 5 years. In 1991, 270 cases of Hib were notified compared with 117 in 1993 and 13 in 1996. The notifications of whooping cough (Pertussis) have fluctuated widely, increasing from 71 cases in 1991 to 527 cases in 1993, before decreasing to 393 cases in 1995 and increasing again in 1996 to 1,344.

In April 1995 the ABS collected data on child immunisation. Data from the survey showed that the proportion of children considered fully immunised declined with age. This decline was consistent for all diseases covered by the immunisation schedule except measles and mumps. For both these diseases, the proportion of fully immunised children remained relatively high for most age groups in comparison with other diseases. The following table is the current recommended childhood vaccination schedule for children aged 6 years and less, as introduced by the National Health and Medical Research Council (NH & MRC) in August 1994. It was used by the ABS to define the immunisation status of children in the survey.

7.9 NH AND MRC VACCINATION SCHEDULE FOR CHILDREN, AUGUST 1994

Age	Disease	Vaccine
2 months	Diphtheria, Tetanus, Pertussis Poliomyelitis Haemophilus influenza type b (Hib) (Schedule 1 or 2)(b)	DTP-Triple antigen OPV-Sabin vaccine Hib Vaccine (a, b or c)(a)
4 months	Diphtheria, Tetanus, Pertussis Poliomyelitis Hib (Hib) (Schedule 1 or 2)(b)	DTP-Triple antigen OPV-Sabin vaccine Hib Vaccine (a, b or c)(a)
6 months	Diphtheria, Tetanus, Pertussis Poliomyelitis Hib (Hib) (Schedule 1 only)	DTP-Triple antigen OPV-Sabin vaccine Hib Vaccine (a or b)(a)
12 months	Measles, Mumps and Rubella Hib (Schedule 2 only)	MMR Hib vaccine(c)(a)
18 months	Diphtheria, Tetanus, Pertussis Hib (Schedule 1 only)	DTP-Triple antigen Hib vaccine (a or b)(a)
Prior to school entry (4-5 years)	Diphtheria, Tetanus, Pertussis Poliomyelitis	DTP-Triple antigen OPV-Sabin vaccine

(a) Abbreviations for Hib vaccine-(a) is HbOC ('HibTITER'), (b) is PP-T ('Act-HIB'), (c) is PRP-OMP ('PedvaxHIB'). (b) is PP-T('Act-HIB'), (c) is PRP-OMP ('PedvaxHIB'). (b) Schedule 1 Hib vaccination refers to the use of HbOC and PRP-T. Schedule 2 Hib vaccination refers to the use of PRP-OMP. A fourth vaccine (PRP-D 'ProHIBit') is approved for use as a single injection for children over the age of 18 months.

Source: National Health and Medical Research Council.

A higher proportion of Victorian children aged 1 year were immunised for all conditions when compared with the national average. However, the Victorian immunisation rates fell below the national average for Diphtheria/Tetanus and Whooping cough (Pertussis) for children aged 2 years, and additionally for Polio for children aged 6 years. The drop in the proportion of children aged 2 years immunised for Diphtheria, Tetanus and Whooping cough (Pertussis) occurred nation-wide. A possible explanation for this decline was the omission of the DTP (Triple Antigen) booster, required at 18 months.

7.10 PERCENTAGE OF CHILDREN FULLY IMMUNISED BY CONDITION, VICTORIA AND AUSTRALIA, APRIL 1995

Age	Diphtheria/Tetanus	Whooping cough (Pertussis)	Polio	Hib	Measles	Mumps	Rubella
VICTORIA							
1 year	91.7	89.6	87.9	65.6	87.4	86.9	84.9
2 years	58.4	52.4	88.2	55.6	92.5	92.0	85.2
6 years	39.4	15.5	56.0	30.1	94.9	93.1	72.5
AUSTRALIA							
1 year	88.5	86.2	86.3	62.3	86.8	86.0	81.4
2 years	63.0	57.5	86.9	52.4	91.5	90.1	81.1
6 years	45.2	17.2	60.2	26.6	91.7	88.4	62.8

Source: Children's Immunisation, Australia (4352.0).

The proportion of those fully immunised against Polio remained similar for children of all ages, until the age 6, when significant decreases were recorded nation-wide. Proportions of children fully immunised against Hib were lower than for any other disease on the immunisation schedule at all ages.

In addition to information about vaccinations recommended in the Standard Childhood Vaccination Schedule, the survey collected information about selected other types of vaccination. The highest proportion of children had received a Tetanus vaccination, other than in DTP or CDT form.

The ABS also studied the reasons why children were not immunised. The table below is for Australia because the sample size for Victoria alone was generally too small for the information to be useful, but there is no reason to believe that Victoria is different from the rest of Australia in this area. The main reason given for not immunising was that the child was too young. The most commonly reported reason for children not being immunised against Hib was that the parent had not heard of the vaccine. For almost a third of children who had not been immunised against Rubella the main reason given was that it was only for girls.

7.11 CHILDREN AGED 3 MONTHS TO 6 YEARS NOT IMMUNISED: CONDITION BY MAIN REASON NOT IMMUNISED, AUSTRALIA, APRIL 1995

Reason	Diphtheria, Tetanus or Pertussis	Polio	Measles(a)	Mumps(a)	Rubella(a)	Hib
Advised against it	(b)8.3	(b)5.6	(b)2.3	(b)1.8	1.1	3.4
Concerned about side-effects	(b)6.6	(b)3.3	6.5	5.6	2.2	3.2
Hadn't heard of it	10.1	(b)6.7	6.6	10.6	5.3	37.8
Hadn't got around to it	14.5	19.7	26.2	24.4	14.0	11.3
Opposed to immunisation	18.4	16.7	5.7	4.7	1.9	1.8
Sick when due for immunisation	(b)7.4	(b)6.7	9.8	8.0	3.3	1.5
Too expensive	..	..	(c)0.4	(c)0.3	(b)0.3	3.0
Too young	25.4	31.6	30.0	29.7	28.9	7.8
Vaccine available/given	(c)0.9	(b)2.2	3.1	3.5	5.7	7.8
Boy (rubella injection is for girls only)	..	..	..	..	32.3	..
Hib-too old/out of danger age	..	..	..	..	..	16.8
Other	(b)7.4	(b)7.4	9.3	11.4	5.1	5.7

(a) Children aged 1 year or less were excluded from estimates for Measles, Mumps and Rubella. (b) Relative standard error between 25% and 50%. (c) Subject to sampling variability too high for most practical purposes.

Source: *Children's Immunisation, Australia* (Cat. no. 4352.0).

NON INFECTIOUS DISEASES

Non-infectious diseases of most concern in the community include the incidence of cardiovascular disease and cancer. Advances in screening technologies, treatment, and community education have led to significant reductions in the incidence of these conditions in the community.

Despite substantial decreases in death rates over the past 20 years, cardiovascular disease remains a major health problem for Victorians. In 1996, ischaemic heart disease was responsible for the deaths of 7,284 people, of whom 2,439 were under the age of 75 years. A further 3,136 people died from cerebrovascular disease.

Although improvements in the treatment have made some contribution to the decrease of deaths from cardiovascular disease, much of the decline in heart disease has been attributed to the reduction in risk factors leading to heart attacks. A decline in smoking and consumption of animal fats, and improved screening and control of hypertension have been particularly significant. The decline in deaths from stroke in Australia is largely attributed to reductions in blood pressure levels within the community, through the use of anti-hypertensive drugs and improved diet.

Cancers accounted for 9,060 Victorian deaths in 1996. For males, lung cancer is the primary cause of cancer related death, while prostate cancer is responsible for the highest incidence of cancer. For females, breast cancer accounts for the highest incidence and the highest number of deaths.

While significant gains have been made as a result of preventative programs and improvements in detection and treatment, numbers of deaths overall continue to rise. The successful treatment of cancers depends on the type of cancer and stage of its detection.

Some cancers can be prevented by managing risk factors, for example smoking in the case of lung cancer and sunlight in the case of melanoma. Community education programs, such as the 'Quit' and 'Slip Slop Slap' campaigns, have been employed to raise awareness of specific risk factors to health. Cancers usually manifest after a lengthy latent period. This results in a lag between the introduction of a preventative program and a subsequent reduction in incidence or death rates.

Where screening for cancer is undertaken and reliable tests and treatments are available, significant gains for the community can be made. In 1996 the death rate from cancer of the cervix was 2.8 per 100,000 women, less than half the rate of 6.5 per 100,000 recorded in 1973. Early detection and treatment made possible through the Pap smear screening program is a significant factor in this reduction. To reduce deaths from breast cancer through early detection and treatment, screening for women over 50 years old has been progressively introduced in Victoria since 1990. Effective screening tests have not been developed yet for the more common cancers of the colon and rectum. Work is also continuing on the development and evaluation of screening tests for cancer of the prostate in men.

DISABILITY AND AGEING

In 1993 the ABS conducted a Survey of Disability, Ageing and Carers, providing estimates of the numbers and main characteristics of persons with disabilities, persons with handicaps, persons aged 60 years or more, and carers. The next Survey will be conducted by the ABS in 1998.

A person was identified as having a disability if he/she had one or more of a group of selected limitations which had lasted, or was likely to last, for 6 months or more. A handicap results from a disability which limits a person's ability to perform certain tasks associated with daily living.

Results showed that 818,000 Victorians had a disability, with 640,100 of these people experiencing a handicap because of their disability. Overall the rates per 1,000 population were slightly higher than the Australian average. There were more females than males with both disabilities and handicaps, putting the rates for females well above the Australian average.

7.12 HANDICAP AND DISABILITY STATUS AND RATES(a), 1994

	Handicap	No handicap	Total disability	No disability	Total
Males					
Number ('000)	295.1	102.5	397.5	1 812.8	2 210.3
Victorian rate	133	46	180	820	—
Australian rate	140	45	184	816	—
Females					
Number ('000)	345.0	75.5	420.5	1 830.7	1 251.2
Victorian rate	153	34	187	813	—
Australian rate	144	32	176	824	—
Persons					
Number ('000)	640.1	177.9	818.0	3 643.4	4 461.4
Victorian rate	143	40	183	817	—
Australian rate	142	38	180	820	—

(a) Rate per 1,000 population.

Source: *Disability, Ageing and Carers, Australia: Summary of Findings (4430.0)*.

Medicare

Medicare, as Australia's public health insurance scheme, is one of the major institutions in the health system. Funded by a levy on all employed adults, Medicare is available to all Australians and allows a wide range of goods and services to be accessed. The following table relates to the Health Insurance Commission's (HIC) Medicare operations.

In 1995–96, a total of 48,659,076 Medicare services were processed in Victoria, accounting for a quarter of all Medicare services nationally. This represented a dollar value of \$1,517.6 million.

The largest proportion of Medicare services comprised unreferrals consultations by general practitioners, which accounted for 45.4% of the Victorian total (22,101,216 cases). The next most commonly accessed Medicare service was pathology: 11,528,304 cases were processed or 23.7% of total services. These two services corresponded to the two most accessed services across Australia.

In terms of the dollar value of services processed, however, general practitioners' consultations was 33% of the total (\$507 million) and Pathology 13% (\$190 million). Specialist attendance and diagnostic imaging both accounted for a larger proportion of services processed by dollar value than pathology. Respectively they accounted for \$244.8 million (16%) and \$213.5 million (14%) of the value of total services, while only accounting for 10% and 5% of visits respectively.

7.13 MEDICARE: NUMBER AND VALUE OF SERVICES PROCESSED BY BROAD TYPE OF SERVICE, VICTORIA, 1995–96(a)

Broad type of service	Number of services		Value of services	
	'000	%	\$m	%
Unreferred attendances				
General practitioner/VRGP	22 101.2	45.4	507.0	33.4
Other	3 482.1	7.2	75.3	5.0
Specialist attendance	4 908.6	10.1	244.8	16.1
Obstetrics	375.0	0.8	16.3	1.1
Anaesthetics	475.6	1.0	33.3	2.2
Pathology	11 528.3	23.7	189.7	12.5
Diagnostic imaging	2 530.7	5.2	213.5	14.1
Operations	1 169.1	2.4	134.8	8.9
Assistance at operations	71.6	0.2	7.2	0.5
Optometry	850.3	1.8	33.8	2.2
Radio and nuclear therapy	107.5	0.2	7.4	0.5
Miscellaneous	1 059.0	2.2	54.6	3.6
Total	48 659.1	100.0	1 517.6	100.0

(a) For services processed from 1 July 1995 to 30 June 1996.

Source: Health Insurance Commission—1995–96 Medicare, Pharmaceutical Benefits and Childcare Cash Rebate Statistical Tables.

NATIONAL HEALTH SURVEY

The National Health Survey conducted in 1995 provides information on the health status, health risk factors and actions taken by people in relation to their health.

The majority of Victorians aged 15 years and over consider themselves as being in good health with 84% reporting their health status as good, very good or excellent. The percentage of people reporting fair or poor health tended to increase with age. Nationally, fair or poor health was reported by 9% of those aged 15–24 years compared to 41% of those aged 75 years and over.

The prevalence of reported recent or long-term illness or injury was lower in Victoria (84%) than in Australia overall (86%). Many of the reported conditions were minor and/or easily managed, such as most eyesight disorders of refraction or accommodation which were reported by 46% of the population. Only 7% of Victorians took days off work or school due to illness or injury during the 2 weeks prior to interview.



Photo

Doncaster Surgicentre

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Excluding eyesight disorders, the leading causes of illness in 1995 were respiratory conditions (experienced by 36% of the population), musculoskeletal conditions (25%) and diseases of the circulatory system (21%). The most commonly reported conditions of the respiratory system were asthma (affecting 11% of the population) and hayfever (15%). Arthritic conditions affected 13% of the population, while hypertension (reported by 10% of Victorians surveyed) was the most common circulatory condition experienced. Headaches were reported by over 11% of the population.

7.14 PERSONS BY TYPE OF RECENT AND/OR LONG-TERM CONDITION REPORTED, 1995

Condition	Victoria %	Australia %
Infectious and parasitic diseases	3.6	3.7
Neoplasms	1.8	2.1
Endocrine, nutritional and metabolic diseases and immunity disorders	10.6	12.2
Diseases of the blood and blood-forming organs	2.0	2.0
Mental disorders	5.5	5.8
Diseases of the nervous system and sense organs	51.2	52.9
Diseases of the circulatory system	20.8	21.4
Diseases of the respiratory system	36.3	37.4
Diseases of the digestive system	14.5	15.0
Diseases of the genito-urinary system	6.0	6.4
Complications of pregnancy, childbirth, and the puerperium	0.3	0.2
Diseases of the skin and subcutaneous tissue	9.6	9.9
Diseases of the musculoskeletal system and connective tissue	24.6	26.5
Congenital abnormalities	0.3	0.4
Symptoms, signs, and ill-defined conditions	21.6	24.2
Injuries	5.6	6.4
Disability	0.9	1.3
No illness reported	16.2	14.3
Total population	4 503 100	18 061 100

Source: National Health Survey, unpublished data.

Health risk factors

Being overweight or obese increases the risk of developing many health conditions, including heart disease, stroke, high blood pressure, diabetes mellitus, cancer, respiratory and musculoskeletal conditions. Based on self-reported height and weight, results from surveys in 1989–90 and 1995 indicate that the percentage of adults who were overweight or obese has declined.

Regular physical activity is important in the prevention of many health conditions, including heart disease, hypertension, diabetes, osteoporosis and obesity. It also provides health benefits associated with improved self esteem. In 1995 almost 68% of adult Victorians exercised for recreation, sport or fitness, representing a small increase on the 66% recorded in 1989–90.

Tobacco smoking is a risk factor for heart disease, stroke, peripheral vascular disease, chronic lung disease and cancer of the lung and other organs. In 1995 smokers constituted 23% of Victorian adults, a decline from the 28% recorded in 1989–90. Most of this decline is attributable to people giving up smoking. The percentage of the adult population in Victoria who were ex-smokers in 1989–90 was 23% compared to 27% in 1995.

High levels of alcohol consumption have been linked to an increased risk of heart disease, stroke, neurological disease, liver disease, pancreatic disease and cancer of the liver and other organs. Alcohol intoxication is also a leading cause of road traffic accidents. In 1995, of Victorians who drank, 87% consumed alcohol at levels of low risk to their health compared with 85% nationally.

7.15 SELECTED HEALTH RISK FACTORS, VICTORIA

Stub	Percentage of population		Number 1995 '000
	1989-90 %	1995 %	
Body mass(a)			
Underweight	11.8	9.2	327.9
Overweight/obese	35.6	30.3	1 076.4
Not stated	4.2	10.7	382.3
Exercise level(a)			
Did not exercise	34.6	32.6	1 160.6
Low	30.6	35.0	1 246.8
Moderate/high	34.9	32.5	1 153.3
Smoker status(b)			
Non-smoker	72.2	76.7	2 584.5
Smoker	27.8	23.3	780.2

(a) Persons aged 15 years and over. (b) Persons aged 18 years and over.

Source: *National Health Survey, unpublished data*.

Health related actions

In the two weeks prior to the survey 72% of people reported taking one or more health related actions. Use of medication was the most common action people took for their health (66% of the population). This was followed by consultation with a doctor (23% of the population). Other health professionals, including chemists, physiotherapists/hydrotherapists, chiropractors and nurses were consulted by 10% of the population.

Apart from vitamins and minerals the most commonly used medications were analgesics (pain relievers) which were used by approximately a quarter of the population. Medication used for the treatment of heart/blood pressure, arthritis and sleep disorders increased with age while that used for the treatment of coughs and colds declined with age.

7.16 HEALTH RELATED ACTIONS TAKEN IN THE TWO WEEKS PRIOR TO THE SURVEY, VICTORIA, 1995

Action taken	%	'000
Hospitalisation	0.7	31.5
Emergency/outpatient visit	2.5	111.0
Day clinic visit	1.4	63.0
Doctor consultation	23.0	1 042.2
Dentist consultation	5.5	248.4
Consultation with other health professional	9.9	448.4
Other health-related contact	3.7	165.0
Medication use		
Herbal/natural medicine	8.3	374.9
Vitamins/mineral supplements	24.0	1 082.6
Other medication	55.7	2 519.6
Total medications	65.5	2 961.3
Day(s) away from work/school	7.3	325.8
Other days of reduced activity	5.4	245.3
No action taken	27.9	1 245.5
Total population(a)	100.0	4 503.1

(a) People may have reported more than one type of action so components do not add to totals.

Source: *National Health Survey, unpublished data*.

WOMEN'S HEALTH

The leading causes of death in Australia for women are circulatory diseases (ischaemic heart disease and stroke) and cancers (breast, lung and colon).

Breast cancer is the most common cause of cancer death among females. The risk of developing or dying from breast cancer increases significantly with age, the average age of diagnosis being 64 years. Although there appears to be little that can be done to prevent breast cancer it is possible to reduce deaths from this cause if the cancer is identified at an early stage. Women aged 45–64 years were the most likely to have used any form of breast cancer screening. In comparison women over 64 years were less likely than women aged 45–64 years to have used any method of breast cancer screening despite being more at risk. In Victoria 61% of women over 18 years of age conducted regular breast self-examination. This was lower than the national average of 65%.

7.17 WOMEN'S USE OF CERVICAL AND BREAST CANCER SCREENING(a), AUSTRALIA, 1995

	Age group (years)						75 and over %	Total %
	18–24 %	25–34 %	35–44 %	45–64 %	65–74 %			
Cervical cancer								
Have ever had a pap smear test	58.6	88.3	91.2	89.2	73.1	46.1	80.8	
Have had a pap smear test in last 2 years	52.4	74.8	70.4	56.5	30.3	9.6	57.2	
Breast cancer								
Regular self-examination	52.1	63.7	70.9	72.5	62.5	51.1	65.0	
Have ever had examination by doctor	37.1	69.5	80.4	83.9	76.1	55.6	70.9	
Have ever had mammogram	3.5	10.9	31.8	66.6	55.0	29.5	35.0	

(a) Includes only those women who participated in this part of the National Health Survey.

Source: *Australian Women's Year Book* (Cat. no. 4124.0).

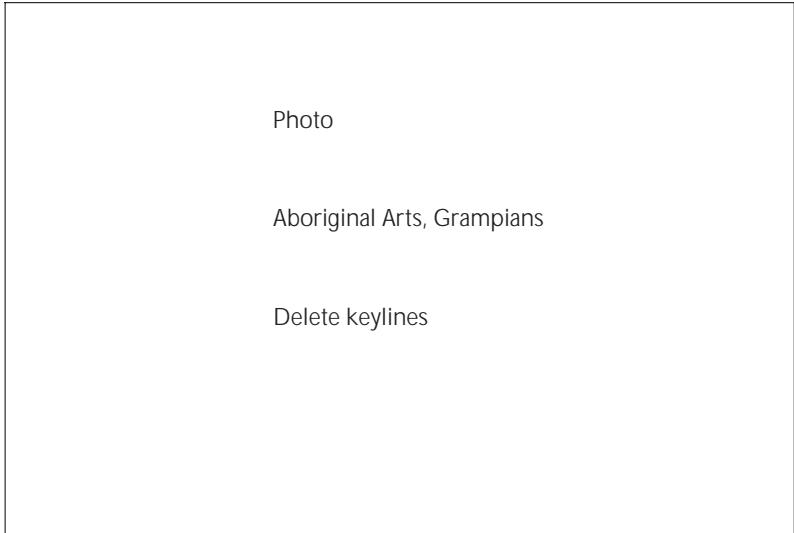
The fall in deaths due to cervical cancer during the 1980s and 1990s is attributed to national screening and treatment programs. It is recommended that women have a pap test every 2 years. Nationally, in 1995, women aged 25–34 were most likely to have been tested in the previous 2 years. For women aged 35 and over, the likelihood of having had a recent test declined with age. In Victoria, 57% of women had had a pap test within the 2 years prior to the National Health Survey and almost 18% reported that they had never had a pap test.

Breastfeeding has major health advantages for both infants and mothers. For infants it provides nutritional, immunological and psychological benefits and is of particular value in the first 4–6 months of life. For mothers, breastfeeding assists with contraception and may give protection against pre-menopausal breast cancer and osteoporosis. In Victoria records from infant welfare centres indicate that the proportion of children fully breastfed at 3 months of age dropped significantly between 1950 and 1970 (from 48% to 21%). Since the 1970s, health promotion programs by governments and organisations such as the Nursing Mothers Association have assisted in reversing this trend. Nationally, in 1995, 86% of children under 4 years of age had been breastfed at some time (87% in Victoria). The average time of being exclusively breastfed was 16 weeks, with solid food most commonly introduced between 17 and 28 weeks.

Indigenous Health

In this section information is included about the Indigenous population in relation to health status, health related actions, health risk factors and availability of health services. Because of the size of the Victorian Indigenous population it is often difficult to obtain reliable data specific to the State's Indigenous population. Where possible Victorian data has been included.

The 1994 National Aboriginal and Torres Strait Islander survey, which represented 19,200 Indigenous people in Victoria, identified that 54% of this population (10,300 people) experienced recent illness (in the two weeks prior to the survey) compared to the national average of 41%. Illnesses related to the respiratory system was the most common being reported by 35% of those who experienced a recent illness.



Photo

Aboriginal Arts, Grampians

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An estimated 57% of people (44% nationally) stated that they took a health related action in the two weeks prior to the survey. The most common actions were the use of medication (76%), consultation with a doctor (52%) or reduction of daily activities (34%). An Aboriginal health worker was consulted by 6% of those who took health related actions in the period.

The most commonly reported health conditions affecting Indigenous Victorians were asthma which affected 23% of the population, ear and hearing problems (13%), skin problems (13%) and high blood pressure which affected 10% of the population.

One aspect of access to health facilities can be measured by distance. Within the Melbourne region, the percentage of Indigenous households within 25km of permanent health services was over 90% for most services surveyed. However, access to Aboriginal Health Workers, Mental Health Services and Health Promotion Services was much lower (74%, 78% and 78% respectively) 19% of households reported that Aboriginal Health Workers were not available within a distance of 25kms.

In other urban and rural areas of Victoria, significantly fewer households were within 25 kms of permanent or visiting health services. A substantial proportion of households reported that Aboriginal Health Workers (18%), Dentists (24%), Health promotional services (26%), Diabetic services (17%) and Sexually transmitted diseases clinics (23%) were not available within a distance of 25kms.

7.18 AVAILABILITY OF HEALTH PROFESSIONALS WITHIN 25KM OF HOUSEHOLD, VICTORIA, 1994

Health service	Capital city	Other rural/urban
Doctor	100.0	93.0
Nurse	98.9	96.0
Aboriginal health worker	73.5	74.0
Dentist	98.9	44.8
Mental health service	77.5	63.1
Health promotional services	77.7	48.6
Ante-natal services	94.3	59.0
Diabetic services	94.3	74.6
Women's health services	98.9	62.6
Baby health services	98.9	72.9
Sexually transmitted diseases	91.6	61.0

Source: National Aboriginal and Torres Strait Islander Survey (4190.2).

73% of persons aged 13 years and over thought that it was important for Indigenous people to be involved in the provision of their health care. For the same population, 84% said they were happy, or sometimes happy, with the local health services provided while 8% indicated they were not happy with local health services and 13% stated that they had problems with local health services.

Health risk factors

Health risk factors relate to lifestyle, diet and community practices which can impact on the overall health of the individual, for example, leading to higher susceptibility to heart disease or respiratory illness.

In addition to the greater risk of various forms of cancer, cigarette smoking is also been found associated with numerous other conditions such as heart disease, stroke and low birth weight. Nationally in 1994, about 50% of Indigenous people over the age of 13 years reported that they smoked. In Victoria, in the same survey, 53% of Indigenous males and 61% of Indigenous females reported that they smoked. In comparison the 1995 National Health Survey found that 23% of the total Victorian population 18 years and over stated that they smoked.

Relative body weight is important both as a consequence of past and current health and as a predictor of future health. For example, being underweight may reflect poor nutrition or illness, while obesity is a risk factor for diabetes. In Victoria 43% of Indigenous people were classified (according to calculated Body Mass Index (BMI) as overweight or obese and 44% were classified as underweight or of acceptable weight.

Breastfeeding has nutritional and immunological advantages for the developing child and is associated with reduced infant and child mortality. In Victoria, in 1994, it was found that 62% of Indigenous children aged 12 years and under were breastfed as infants (71% nationally), with 26% of children being breastfed for 6 months or longer.

SOCIAL SECURITY

The Department of Social Security administers a range of schemes which provide financial support to individuals and families. It also provides the framework to support access to employment for those with the ability to participate in the workforce. This section brings together statistical information relating to the recipients of each main payment type. Separate data on supplementary payments (such as remote area allowance) are not included.

Unless otherwise indicated, these statistics relate to the relevant pay periods closest to 30 June of the reference year.

Additional classifications have been included in this section relating to new payments, such as maternity allowance and parenting allowance. Other benefit payments such as home child care allowance have either been included in alternative payments or have been renamed since June 1995.

It is important to note that over the years there have been changes to the conditions of eligibility applying to the payments. As it is not readily possible to indicate all the changes that have occurred, any analysis of historical data should generally be undertaken with caution.

7.19 SOCIAL WELFARE PROGRAMS, VICTORIA

Type of program	June 1994	June 1995	June 1996
Pensions, the sick and disabilities			
Age pension	404 830	404 540	410 122
Disability support pension	101 845	107 709	115 580
Wife pension	36 620	38 560	35 403
Carer pension	4 251	5 014	6 278
Sickness allowances	10 696	10 856	8 796
Mobility allowances	6 094	6 772	7 572
Child disability allowance	17 742	19 679	22 730
Labour market allowance			
Youth training(a)	—	4 260	6 361
Jobsearch allowance	114 966	99 802	111 579
Newstart allowance	121 190	108 208	93 879
Mature age	7 192	10 664	12 606
Mature age partner	2 798	4 350	3 474
Partner allowance(a)	—	56 304	20 137
Family payment			
Family	447 771	440 179	441 065
Double orphan pension	298	297	295
Sole parent pensions	68 734	71 417	75 144
Parenting allowance(b)	—	—	165 427
Maternity allowance(c)	—	—	19 901
Child care assistance(a)	—	53 426	61 164
Other social security payments			
Special benefits	7 626	6 142	5 682
Drought relief	—	—	14
Widow pension class B	15 497	14 110	12 982
Widow allowance(a)	—	2 477	3 365

(a) From 1 Jan 1995. (b) From 1 July 1995. (c) From 1 Feb 1996.

Source: DSS customers-A Statistical Overview 1996.

VETERANS AFFAIRS

Veterans' Affairs is a Commonwealth responsibility. The Repatriation Commission provides veterans and their dependants with a range of benefits to compensate for the effects of war or defence service. The Department of Veterans' Affairs provides administrative support to the Repatriation Commission in providing these benefits.

Service Pensions

Service Pensions are payable to veterans who served in a theatre of war and have reached the age of 60 years for males or 56 years for females, or who are permanently incapacitated for work regardless of age. The Government has introduced changes to the minimum age at which female veterans qualify for a Service Pension, so that the age qualification will be lifted from 55 to 60 years in six monthly increments every two years. This will bring it in line with the male age qualification on 1 July 2013. On 1 July 1997 the female qualifying age was 56 years. Service Pensions are also paid to wives and widows of veterans. They are also available to certain Commonwealth and Allied veterans who satisfy residency requirements.

7.20 SERVICE PENSIONS PAYABLE, JULY 1997

	Service pensions to veterans		Service pensions to veterans' wives and widows	
	Victoria	Australia	Victoria	Australia
World War 1	18	82	62	272
World War 2	32 752	136 717	24 934	103 314
Korea, Malaya, and Far East Strategic Reserve	1 287	8 140	909	5 799
Special Overseas Service (Viet Nam War)	1 169	9 959	822	7 030
Gulf War	—	2	—	1
Australian Mariners	227	1 758	152	1 269
British Commonwealth and Allied (not separated by conflict)	6 205	29 576	5 312	24 835
Total	41 658	186 234	32 191	142 520

Source: *Benefits Statistics Summary, June 1997, Dept of Veterans Affairs.*

Disability Pensions

Disability pensions may be paid to veterans with qualifying service who are suffering incapacity from a service related injury or disease. It is also payable to widows and dependants of veterans whose death was service related or who were totally and permanently incapacitated prior to their death.

The rate for disability pension changes in proportion to the degree of incapacity. Higher rates of pension are available to the most severely disabled veterans.

Note that pensioners can receive both a service and a disability pension.

7.21 DISABILITY PENSIONS PAYABLE, JULY 1997

	Disability pensions to veterans		Pensions to dependants of incapacitated veterans		Pensions to dependants of deceased veterans (War widows)	
	Victoria	Australia	Victoria	Australia	Victoria	Australia
World War 1	14	47	249	848	851	2 543
World War 2	26 763	112 580	14 990	60 479	24 441	91 117
Korea, Malaya, and Far East Strategic Reserve	738	5 302	304	1 930	229	1 667
Special Overseas Service (Viet Nam War)	3 129	15 375	1 595	6 469	208	962
Defence Forces, Peace Keeping Forces, and Gulf War	2 897	26 335	441	4 633	26	906
Seaman's war pension	57	506	3	31	48	323
Other(a)	—	—	—	15	—	4
Total	33 598	160 145	17 582	74 405	25 803	97 522

(a) British Merchant Navy and Veterans of PNG.

Source: *Benefits Statistics Summary, June 1997, Dept of Veterans Affairs.*

Other Services

Other Veterans' programs include Defence Service Homes Scheme which provides low interest housing loans, Health Programs and the Viet Nam Veterans Counselling Service.

VOLUNTARY WORK

In 1995 the Australian Bureau of Statistics did a study of volunteer work throughout Australia. A volunteer is defined as someone who willingly gave unpaid help in the form of time, service or skills through an organisation or group. Voluntary work makes an important contribution to Victorian life. It meets needs within the community at the same time as it develops and reinforces social networks and cohesion. The amount and type of volunteer work a person is likely to be involved in varies considerably with such factors as geographical location, sex, occupation and age.

The volunteer rate varies markedly across States and Territories from 26% in Australian Capital Territory to 15% in New South Wales. Victoria at 20% was slightly above the Australian average of 19%. The rate varies within the State with Victorians outside Melbourne more involved in volunteer work (29%) than people who live in Melbourne (16%). Victorian women (22%) are more likely to be involved than men (18%).

7.22 VICTORIAN VOLUNTEERS: MAJOR STATISTICAL REGION BY SEX, 1995

	Unit	Melbourne	Balance of Victoria	Total
Males	'000	174.7	127.9	302.6
	Volunteer rate (%)	14.1	26.5	17.6
	Total hours (million)	25.9	19.9	45.7
Females	'000	238.5	156.8	395.2
	Volunteer rate (%)	18.6	31.6	22.2
	Total hours (million)	34.3	26.0	60.4
Persons	'000	413.2	284.6	697.8
	Volunteer rate (%)	16.4	29.1	20.0
	Total hours (million)	60.2	45.9	106.1

Source: *Voluntary Work, Australia* (Cat. no. 4441.0).

Males were more likely to involve themselves in sport, recreation and hobby activities (41%) followed by Welfare and community activities (28%). Women were most likely to involve themselves in education, training and youth development activities (34%), followed by welfare and community activities (32%). In both sexes the 35–44 year age group were most likely to be involved in volunteer work and the 14–24 year age group the least likely.

7.23 FIELD OF VOLUNTARY WORK BY SEX, VICTORIA, 1995

Field of voluntary work(a)	Males		Females		Persons	
	'000	%	'000	%	'000	%
Sport/recreation/hobby	124.5	41.2	92.4	23.4	216.9	31.1
Welfare/community	85.3	28.2	125.0	31.6	210.4	30.1
Health	15.4	5.1	42.0	10.6	57.4	8.2
Emergency services	25.7	8.5	5.9	1.5	31.5	4.5
Education/training/youth development	58.2	19.2	135.6	34.3	193.9	27.8
Religious	47.1	15.6	6 838.0	17.4	115.9	16.6
Environmental/animal welfare	14.1	4.7	12.0	3.0	26.1	3.7
Business/professional/Union	13.4	4.4	6.5	1.6	19.9	2.9
Law/justice/political	(b)5.2	(b)1.7	5.7	1.5	10.9	1.6
Arts/culture	10.5	3.5	15.4	3.9	25.9	3.7
Other(c)	(b)4.8	(b)1.6	8.9	2.3	13.8	2.0
Total	302.6	100.0	395.2	100.0	697.8	100.0

(a) As a volunteer can work for more than one organisation, the figures for individual field of voluntary work will not add to the total.

(b) Subject to sampling variability between 25% and 50%. (c) Includes Foreign/international.

Source: ABS *unpublished data*.

7.24 VOLUNTEERS BY AGE BY SEX, VICTORIA, 1995

Age group (years)	Males		Females		Persons	
	'000	Volunteer rate %	'000	Volunteer rate %	'000	Volunteer rate %
15-24	32.5	9.6	43.7	13.3	76.2	11.4
25-34	49.2	14.0	76.3	21.3	125.6	17.7
35-44	85.4	25.5	110.8	32.4	196.2	29.0
45-54	61.6	22.3	64.4	23.6	126.0	22.9
55-64	35.7	18.7	40.7	21.4	76.4	20.0
65 and over	38.1	16.8	59.3	20.7	97.4	19.0
Total	302.6	17.6	395.2	22.2	697.8	20.0

Source: ABS Unpublished data.

The study also found that the nature of a person's voluntary work is closely related to their type of paid employment. Managers and administrators were more likely to be involved in management and committee work, whereas tradespersons were much more likely to be involved in repairs, maintenance or gardening activities. Volunteer workers also tended to do volunteer work of a similar nature to the industry in which they are employed.

People involve themselves in voluntary work for a number of reasons. The most common were to help others and the community, personal or family involvement and personal satisfaction. Gaining work experience or a reference was not an important reason except in the 15-24 year age group. The main benefits people felt they got from performing volunteer work were, personal satisfaction and social contact.

Volunteer work is a diverse phenomenon and reflects the diversity of the circumstances of the people involved and the wider community itself. Many charities, sporting, educational and religious organisations depend on Australia's army of volunteer workers. Volunteers also ensure that many more essential services continue to operate in the community, these include fire services, rescue services and the Red Cross Blood service.

AUSTRALIAN RED CROSS BLOOD SERVICE – VICTORIA

During 1997 the Australian Red Cross Blood Service (ARCBS) was formed to manage and co-ordinate Australia's blood service. The transfer of management of the eight State and Territory based blood services form the State divisions of Australian Red Cross Society with a Board of Management and a Chief Executive Officer responsible for its operation. It employs around 2,000 paid staff and 2,500 volunteers.

Australian Red Cross Blood Service—Victoria (formerly known as Red Cross Blood Bank Victoria) continues to be responsible for providing blood and blood products to the Victorian community.

Increase in blood collections

The number of blood donations made in metropolitan Melbourne increased in 1996-97—ending a four year decline. More than 180,000 whole blood collections occurred representing a 1.5% increase on the previous year. Plasma donations also increased by 12.7% on 1995-96.

Major projects have been commenced to improve customer service and maximise collection opportunities in metropolitan Melbourne. These projects will be implemented during 1997-98.

Blood products issued

While overall donations from Victoria's 46 regional collection centres were less than the previous year, whole blood collections at the Geelong Blood Bank reached 20% above target. Plasma collections were introduced at Geelong and reached the monthly target by June 1997.

A new system was introduced to monitor the training needs of the 1,250 volunteer staff based at regional collection centres and to maintain compliance with the Code of Good Manufacturing Practice.

A total of 350,000 units of blood and blood products were provided for Victorian patients. These included 133,400 units of red blood cells for the treatment of haemorrhage and anaemia and 71,750 units of platelets for patients undergoing cancer treatment or suffering from bleeding disorders. The issues of red cells increased by 6.6%, resulting in hospital stocks being limited for several months.

A record amount of plasma, 52.3 tonnes from 174,000 units of plasma, was provided to CSL Bioplasma Ltd. This was manufactured into products for treating kidney and liver diseases, haemophilia, burns and providing patients at risk with temporary protection against rubella, hepatitis A, chickenpox and tetanus.

Victoria joined a national program to provide anti-D immunisation to pregnant women in order to protect their newborn babies from rhesus disease.

Source: Australian Red Cross Blood Services—Victoria.

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Chapter 8

Crime and Justice

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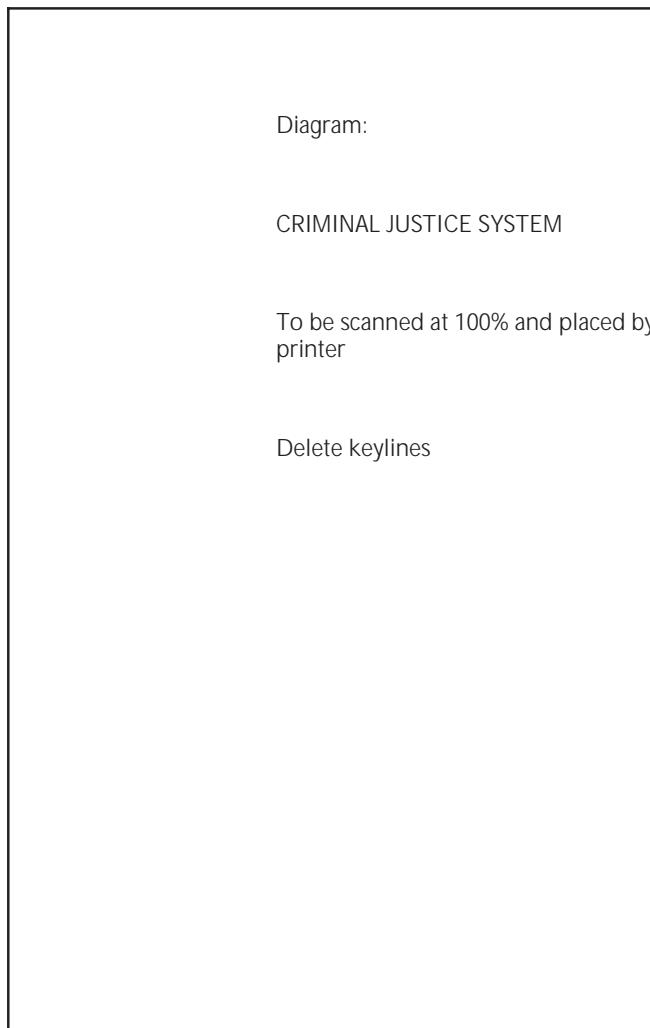
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OVERVIEW

The criminal justice system consists of the State and Commonwealth institutions, agencies, departments and personnel responsible for dealing with the justice aspects of crime, victims of crime, persons accused or convicted of committing a crime and other related issues and processes.

The various agencies that comprise the criminal justice system can be seen as acting within a broader process in which criminal incidents and offenders move through a number of stages. The diagram below indicates these broad stages and the points at which the different justice agencies make their contribution.

**RECORDED CRIME STATISTICS**

Crimes recorded by police relate to offences that have become known to and have been recorded by police. These offences may have been reported by a victim, witness or other person, or they may have been detected by police. The statistics do not provide a total picture of crime as not all crimes come to the attention of the police. In addition care should be taken in interpreting police statistics as fluctuations in reported crime may be a reflection of changes in community attitudes to reporting crime, changes in police procedures or changes in crime recording systems rather than a change in the incidence of criminal behaviour.

In 1996 the number of crimes in Victoria increased for other theft, robbery, assault and blackmail/extortion compared with 1995. The numbers for other crime categories either stayed about the same or decreased. However, the victimisation rates for all offence categories in Victoria were generally well below the Australian average.

8.1 VICTIMS OF CRIME RECORDED BY POLICE

	Victoria			Australia		
	Rate(a)			Number 1996	Rate 1996	Number 1996
	1994	1995	1996			
Homicide						
Murder	1.25	1.37	1.16	53	1.70	311
Attempted murder etc.	1.30	1.02	0.75	34	1.81	331
Manslaughter	0.11	0.11	0.04	2	0.20	37
Driving causing death	0.36	0.49	0.48	22	1.85	339
Assault(b)	n.a.	350.01	355.64	16 220	620.12	113 535
Sexual assault	63.30	61.98	60.67	2 767	78.62	14 394
Kidnapping/abduction	2.17	2.10	2.08	95	2.62	479
Robbery						
Armed robbery	17.27	16.76	18.59	848	33.96	6 217
Unarmed robbery	18.95	20.99	23.31	1 063	55.32	10 129
Blackmail/extortion	1.63	1.24	1.73	79	1.41	258
Unlawful entry with intent	1 600.11	1 570.43	1 549.44	70 667	2 183.33	399 735
Motor vehicle theft	612.45	647.88	630.08	28 737	671.44	122 931
Other theft(c)	n.a.	2 473.10	2 615.28	119 278	2 844.56	520 795

(a) Reported incidents per 100,000 population. (b) Assault data was not collected in 1994. (c) Other Theft data was not collected in 1994.

Source: *Recorded Crime, Australia, 1996* (Cat. no. 4510.0).

Assault

Table 8.1 shows that the most common category of offences recorded against the person was assault with 16,220 cases recorded in Victoria in 1996, a rate of 355 per 100,000 population. Males comprised over half of all assault victims, with the highest victimisation rate of assault being for males aged between 20–34 years (see Table 8.2).

Table 8.3 indicates that female victims were more likely to have been assaulted by someone known to them, whereas the offender was more likely to be unknown to male victims of assault. The most frequent locations of assault offences were private dwellings and streets and footpaths. A weapon was used in 7% of assaults.

Murder

There were 53 recorded cases of murder in Victoria, a rate of 1.16 victims per 100,000. The most likely murder victims in 1996 were males aged 20–44 years. Most murders were committed with some type of weapon (62%), with a firearm used in about 13% of cases. The majority of murders were committed by someone known to the victim and the most common site for the murder was a private dwelling.

8.2 VICTIMS OF CRIME RECORDED BY POLICE(a), BY AGE AND SEX, VICTORIA, 1996

	Number of person victims									Total
	0-9	10-19	20-24	25-34	35-44	45-54	55-64	65 and over	Not stated	
MALES										
Homicide										
Murder	5	4	6	6	6	5	1	3	—	36
Attempted murder etc.	1	2	3	7	2	2	1	1	3	22
Manslaughter	1	—	—	—	—	—	—	—	—	1
Driving causing death	—	—	8	3	3	—	1	1	—	16
Assault	695	1 482	1 896	3 046	1 442	712	243	127	943	10 586
Sexual assault	152	97	61	89	44	12	—	1	37	493
Kidnapping/abduction	12	—	1	2	—	—	—	—	2	17
Robbery										
Armed robbery	18	69	94	93	65	59	24	15	18	455
Unarmed robbery	67	192	113	116	61	45	19	10	18	641
Blackmail/extortion	—	13	3	5	9	12	2	1	6	51
FEMALES										
Homicide										
Murder	2	—	2	3	5	2	—	2	1	17
Attempted murder etc.	1	—	—	2	3	3	—	—	2	11
Manslaughter	—	—	—	1	—	—	—	—	—	1
Driving causing death	—	1	1	3	1	—	—	—	—	6
Assault	380	739	909	1 399	732	357	83	77	396	5 072
Sexual assault	517	556	341	408	225	67	17	9	92	2 232
Kidnapping/abduction	19	20	9	11	7	1	—	3	7	77
Robbery										
Armed robbery	4	21	29	47	42	27	12	4	23	209
Unarmed robbery	18	49	50	66	50	53	17	58	20	381
Blackmail/extortion	—	1	3	6	5	1	—	1	3	20
NOT STATED										
Homicide										
Murder	—	—	—	—	—	—	—	—	—	—
Attempted murder etc.	—	—	—	1	—	—	—	—	—	1
Manslaughter	—	—	—	—	—	—	—	—	—	—
Driving causing death	—	—	—	—	—	—	—	—	—	—
Assault	9	20	20	51	22	23	7	5	405	562
Sexual assault	7	6	3	4	1	2	—	3	16	42
Kidnapping/abduction	—	—	—	—	—	—	—	—	1	1
Robbery										
Armed robbery	—	—	1	1	—	1	—	—	3	6
Unarmed robbery	—	3	—	1	—	4	1	—	2	11
Blackmail/extortion	—	—	—	—	—	1	—	—	—	1
TOTAL PERSONS										
Homicide										
Murder	7	4	8	9	11	7	1	5	1	53
Attempted murder etc.	2	2	3	10	5	5	1	1	5	34
Manslaughter	1	—	—	1	—	—	—	—	—	2
Driving causing death	—	1	9	6	4	—	1	1	—	22
Assault	1 084	2 241	2 825	4 496	2 196	1 092	333	209	1 744	16 220
Sexual assault	676	659	405	501	270	81	17	13	145	2 767
Kidnapping/abduction	31	20	10	13	7	1	—	3	10	95
Robbery										
Armed robbery	22	90	124	141	107	87	36	19	44	670
Unarmed robbery	85	244	163	183	111	102	37	68	40	1 033
Blackmail/extortion	—	14	6	11	14	14	2	2	9	72

For footnotes see end of table.

...continued

8.2 VICTIMS OF CRIME RECORDED BY POLICE(a), BY AGE AND SEX, VICTORIA, 1996 — *continued*

	Proportion of person victims (%)								Total	
	0-9	10-19	20-24	25-34	35-44	45-54	55-64	65 and over		
MALES										
Homicide										
Murder	9.4	7.5	11.3	11.3	11.3	9.4	1.9	5.7	—	67.9
Attempted murder etc.	2.9	5.9	8.8	20.6	5.9	5.9	2.9	2.9	8.8	64.7
Manslaughter	50.0	—	—	—	—	—	—	—	—	50.0
Driving causing death	—	—	36.4	13.6	13.6	—	4.5	4.5	—	72.7
Assault	4.3	9.1	11.7	18.8	8.9	4.4	1.5	0.8	5.8	65.3
Sexual assault	5.5	3.5	2.2	3.2	1.6	0.4	—	0.0	1.3	17.8
Kidnapping/abduction	12.6	—	1.1	2.1	—	—	—	—	2.1	17.9
Robbery										
Armed robbery	2.7	10.3	14.0	13.9	9.7	8.8	3.6	2.2	2.7	67.9
Unarmed robbery	6.5	18.6	10.9	11.2	5.9	4.4	1.8	1.0	1.7	62.1
Blackmail/extortion	—	18.1	4.2	6.9	12.5	16.7	2.8	1.4	8.3	70.8
FEMALES										
Homicide										
Murder	3.8	—	3.8	5.7	9.4	3.8	—	3.8	1.9	32.1
Attempted murder etc.	2.9	—	—	5.9	8.8	8.8	—	—	5.9	32.4
Manslaughter	—	—	—	50.0	—	—	—	—	—	50.0
Driving causing death	—	4.5	4.5	13.6	4.5	—	—	—	—	27.3
Assault	2.3	4.6	5.6	8.6	4.5	2.2	0.5	0.5	2.4	31.3
Sexual assault	18.7	20.1	12.3	14.7	8.1	2.4	0.6	0.3	3.3	80.7
Kidnapping/abduction	20.0	21.1	9.5	11.6	7.4	1.1	—	3.2	7.4	81.1
Robbery										
Armed robbery	0.6	3.1	4.3	7.0	6.3	4.0	1.8	0.6	3.4	31.2
Unarmed robbery	1.7	4.7	4.8	6.4	4.8	5.1	1.6	5.6	1.9	36.9
Blackmail/extortion	—	1.4	4.2	8.3	6.9	1.4	—	1.4	4.2	27.8
NOT STATED										
Homicide										
Murder	—	—	—	—	—	—	—	—	—	—
Attempted murder etc.	—	—	—	2.9	—	—	—	—	—	2.9
Manslaughter	—	—	—	—	—	—	—	—	—	—
Driving causing death	—	—	—	—	—	—	—	—	—	—
Assault	0.1	0.1	0.1	0.3	0.1	0.1	0.0	0.0	0.0	3.5
Sexual assault	0.3	0.2	0.1	0.1	0.0	0.1	—	0.1	0.6	1.5
Kidnapping/abduction	—	—	—	—	—	—	—	—	1.1	1.1
Robbery										
Armed robbery	—	—	0.1	0.1	—	0.1	—	—	0.4	0.9
Unarmed robbery	—	0.3	—	0.1	—	0.4	0.1	—	0.2	1.1
Blackmail/extortion	—	—	—	—	—	1.4	—	—	—	1.4
TOTAL PERSONS										
Homicide										
Murder	13.2	7.5	15.1	17.0	20.8	13.2	1.9	9.4	1.9	100.0
Attempted murder etc.	5.9	5.9	8.8	29.4	14.7	14.7	2.9	2.9	14.7	100.0
Manslaughter	50.0	—	—	50.0	—	—	—	—	—	100.0
Driving causing death	—	4.5	40.9	27.3	18.2	—	4.5	4.5	—	100.0
Assault	6.7	13.8	17.4	27.7	13.5	6.7	2.1	1.3	10.8	100.0
Sexual assault	24.4	23.8	14.6	18.1	9.8	2.9	0.6	0.5	5.2	100.0
Kidnapping/abduction	32.6	21.1	10.5	13.7	7.4	1.1	—	3.2	10.5	100.0
Robbery										
Armed robbery	3.3	13.4	18.5	21.0	16.0	13.0	5.4	2.8	6.6	100.0
Unarmed robbery	8.2	23.6	15.8	17.7	10.7	9.9	3.6	6.6	3.9	100.0
Blackmail/extortion	—	19.4	8.3	15.3	19.4	19.4	2.8	2.8	12.5	100.0

(a) Refers to person victims only. For offences where the victim may be a person or an organisation, such as Armed Robbery, Unarmed Robbery and Blackmail/Extortion, person victims only are included.

Source: *Recorded Crime, Australia, 1996* (Cat. no. 4510.0).

Sexual assault

Police recorded 2,767 victims of sexual assault in Victoria, a rate of 60.67 victims per 100,000 population. In 1996, 80% of victims for sexual assault were female and females aged under 20 years comprised almost 40% of total victims. In most cases the offender was known to the victim (see Table 8.3) and the most common locations for sexual assault were private dwellings.

Robbery

A total of 1,911 cases of robbery were recorded in 1996. Armed robbery accounted for 44% of these. Organisations were the victims in about a quarter of the cases of armed robbery in 1996 and, for the other three-quarters of cases, males were twice as likely to be victims as females. Organisations were much less likely to be victims of unarmed robberies, but again males were more likely to be victims than females. The most common location for armed robberies was retail locations, while most unarmed robberies occurred on streets and footpaths.

8.3 VICTIMS OF CRIME(a), BY SEX OF VICTIM AND RELATIONSHIP OF OFFENDER TO VICTIM, VICTORIA, 1996

Offence category	Murder	Attempted murder	Manslaughter	DCD (c)	Assault	Sexual assault	Kidnapping/abduction	Blackmail/extortion
NUMBER								
Males								
Known to victim								
Family member	6	3	1	2	209	63	1	—
Non-family member	7	5	—	5	636	121	4	8
Total	13	8	1	7	845	184	5	8
Unknown to victim	6	2	—	5	1 147	30	1	9
Not stated	17	12	—	4	8 594	279	11	34
Total	36	22	1	16	10 586	493	17	51
Females								
Known to victim								
Family member	12	4	—	—	370	309	5	—
Non-family member	4	4	1	3	437	485	8	—
Total	16	8	1	3	807	794	13	—
Unknown to victim	—	—	—	2	274	187	11	1
Not stated	1	3	—	1	3 991	1 251	53	19
Total	17	11	1	6	5 072	2 232	77	20
Sex not stated								
Total	—	1	—	—	562	42	1	1
Persons(b)								
Known to victim								
Family member	18	7	1	2	586	375	6	—
Non-family member	11	10	1	8	1 094	617	13	8
Total	29	17	2	10	1 680	992	19	8
Unknown to victim	6	2	—	7	1 463	217	12	10
Not stated	18	15	—	5	13 077	1 558	64	54
Total	53	34	2	22	16 220	2 767	95	72

For footnotes see end of table.

...continued

8.3 VICTIMS OF CRIME(a), BY SEX OF VICTIM AND RELATIONSHIP OF OFFENDER TO VICTIM, VICTORIA, 1996 — *continued*

Offence category	Murder	Attempted murder	Manslaughter	DCD (c)	Assault	Sexual assault	Kidnapping/abduction	Blackmail/extortion								
	PROPORTION (%)															
Males																
Known to victim																
Family member	16.7	13.6	100.0	12.5	2.0	12.8	5.9	—								
Non-family member	19.4	22.7	—	31.3	6.0	24.5	23.5	15.7								
Total	36.1	36.4	100.0	43.8	8.0	37.3	29.4	15.7								
Unknown to victim	16.7	9.1	—	31.3	10.8	6.1	5.9	17.6								
Not stated	47.2	54.5	—	25.0	81.2	56.6	64.7	66.7								
Total	100.0	100.0	100.0	100.0	100.0	100.0	100.0	100.0								
Females																
Known to victim																
Family member	70.6	36.4	—	—	7.3	13.8	6.5	—								
Non-family member	23.5	36.4	100.0	50.0	8.6	21.7	10.4	—								
Total	94.1	72.7	100.0	50.0	15.9	35.6	16.9	—								
Unknown to victim	—	—	—	33.3	5.4	8.4	14.3	5.0								
Not stated	5.9	27.3	—	16.7	78.7	56.0	68.8	95.0								
Total	100.0	100.0	100.0	100.0	100.0	100.0	100.0	100.0								
Persons(b)																
Known to victim																
Family member	34.0	20.6	50.0	9.1	3.6	13.6	6.3	—								
Non-family member	20.8	29.4	50.0	36.4	6.7	22.3	13.7	11.1								
Total	54.7	50.0	100.0	45.5	10.4	35.9	20.0	11.1								
Unknown to victim	11.3	5.9	—	31.8	9.0	7.8	12.6	13.9								
Not stated	34.0	44.1	—	22.7	80.6	56.3	67.4	75.0								
Total	100.0	100.0	100.0	100.0	100.0	100.0	100.0	100.0								

(a) Refers to individual persons only. For Blackmail/Extortion person victims only are included, not organisations. (b) Includes those persons for which sex was not stated, but relationship was recorded. (c) DCD refers to Driving Causing Death.

Source: *Recorded Crime, Australia, 1996* (Cat. no. 4510.0).

Weapon use A weapon was used in 44% of robberies, 62% of murders and 53% of attempted murders. Table 8.4 provides a breakdown of the use of firearms, which were used in 8% of robberies, 13% of murders and 18% of attempted murders. Weapons were far less likely to be used in the commission of assault, sexual assault and kidnapping and abduction offences.

8.4 VICTIMS BY OFFENCE, BY WEAPON USED, VICTORIA, 1996

	Weapons used			Total %	No weapons used %	Total %
	Firearm %	Other weapon %	Weapon n.f.d. %			
Homicide						
Murder	13.2	49.1	—	62.3	37.7	100.0
Attempted murder	17.6	35.3	—	52.9	47.1	100.0
Manslaughter	—	—	—	—	100.0	100.0
Assault	0.5	6.4	—	6.9	93.1	100.0
Sexual assault	0.2	1.8	—	2.0	98.0	100.0
Kidnapping/abduction	3.2	6.3	—	9.5	90.5	100.0
Robbery(a)	8.2	25.6	10.6	44.4	55.6	100.0

(a) Victims of robbery refers to individual persons or organisations. All other offence categories used in this table refer to individual persons.

Source: *Recorded Crime, Australia, 1996* (Cat. no. 4510.0).

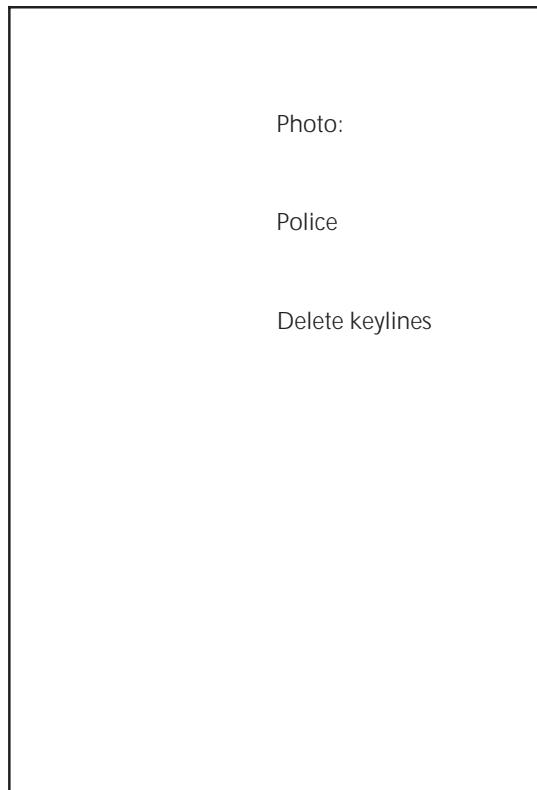
Firearm reform

Australia's gun buy back scheme and amnesty concluded on 30 September 1997. The nationally funded compensation program resulted in the surrendering of newly prohibited firearms and both registered and unregistered firearms.

As at 25 September 1997, in Victoria, 199,279 newly prohibited firearms were surrendered for a total value of \$97,925,853. A total of 14,053 non-prohibited firearms were also surrendered without compensation.

Drug offences

A total of 25,496 arrests were made for drug related offences in Victoria during the period 1 July 1995 to 30 June 1996. The largest category of drug arrests were for cannabis with 19,120 arrests (75% of the Victorian total).

**8.5 TOTAL ARRESTS BY DRUG TYPE, 1 JULY 1995 TO 30 JUNE 1996**

Type of drug	Number		Percentage	
	Victoria	Australia	Victoria	Australia
Cannabis	19 120	78 948	75.0	79.9
Cocaine	36	330	0.1	0.3
Heroin etc.	3 811	7 105	14.9	7.2
Amphetamine	1 633	4 214	6.4	4.3
Hallucinogens	2	398	0.0	0.4
Steroids	0	70	0.0	0.1
Other Drugs	894	7 729	3.5	7.8
Total	25 496	98 794	100.0	100.0

Source: Australian Illicit Drug Report, 1995-96—Australian Bureau of Criminal Intelligence.

Outcome of Investigations

Outcome of investigations statistics show the status of the police investigation processes that are initiated following the reporting or detection of an offence. The status of investigations includes:

- investigations that were not finalised i.e. were still continuing, were pending, or suspended;
- investigations that were finalised without an offender being proceeded against because the reported offences was not verified, the complaint was withdrawn, or the alleged offender could not be proceeded against because of some statutory or procedural bar; and
- investigations that were finalised and an offender was proceeded against by initiating court action or some other form of formal proceeding (e.g. a diversionary conference or a caution).

Table 8.6 shows that in 1996, in Victoria, a higher proportion of offences against the person (homicide, assault and sexual assault offences) reached a finalised investigative status within 90 days compared with offences against property (unlawful entry with intent and motor vehicle theft offences). Similarly the proportion of offenders proceeded against was higher for offences against the person than for property offences. In the majority of investigations, where a finalised outcome was reached, this outcome was reached within 30 days.

8.6 OUTCOME OF INVESTIGATION STATUS, VICTORIA, 1 JULY TO 31 OCTOBER 1996(a)

Offence category	Murder	Attempted murder	Assault	Sexual assault	UEWI theft	Motor vehicle theft
NUMBER						
30 day status						
Investigation not finalised	5	2	2 379	477	16 844	8 688
Investigation finalised						
No offender proceeded against	1	—	302	159	129	217
Offender proceeded against	7	11	2 557	314	1 371	712
Total	13	13	5 238	950	18 344	9 617
90 day status						
Investigation not finalised	4	1	1 968	393	16 374	8 514
Investigation finalised						
No offender proceeded against	1	—	376	184	161	239
Offender proceeded against	8	12	2 894	373	1 809	864
Total	13	13	5 238	950	18 344	9 617
PROPORTION (%)						
30 day status						
Investigation not finalised	38.5	15.4	45.4	50.2	91.8	90.3
Investigation finalised						
No offender proceeded against	7.7	—	5.8	16.7	0.7	2.3
Offender proceeded against	53.8	84.6	48.8	33.1	7.5	7.4
Total	100.0	100.0	100.0	100.0	100.0	100.0
90 day status						
Investigation not finalised	30.8	7.7	37.6	41.4	89.3	88.5
Investigation finalised						
No offender proceeded against	7.7	—	7.2	19.4	0.9	2.5
Offender proceeded against	61.5	92.3	55.3	39.3	9.9	9.0
Total	100.0	100.0	100.0	100.0	100.0	100.0

(a) For a selection of offences only. Driving Causing Death, Manslaughter, Blackmail/Extortion and Kidnapping/Abduction, and Other Theft are excluded.

Source: Recorded Crime, Australia, 1996 (Cat. no. 4510.0).

CRIME STOPPERS

Crime Stoppers has become an extremely successful community based crime solving initiative throughout Australia and other countries around the world since it was introduced in New Mexico in 1976.

It is based on the premise that, for the majority of crimes committed, some person other than the offender or victim has the ability to provide information that will solve that crime, or assist to solve it.

Crime Stoppers was first introduced into Australia by the Victoria Police in November 1987. The program relies on the co-operation between police, the general community and the media to provide a flow of information about crime and criminals as a result of publicity and information.

The program operates through a weekly crime segment shown on the 9, 7 and WIN television networks. Weekly target crimes are featured, complimented by daily newspaper and radio station coverage. The crime is shown at the scene and police request information on a crime that has proven to be difficult to solve through traditional methods.

These weekly target crimes also act as a promotional avenue for the Crime Stoppers program in that it encourages members of the public to provide information about other crimes.

Personnel receiving the information evaluate it, make initial inquiries and then pass it on to the relevant investigating agencies.

8.7 CRIME STOPPERS, RESULTS TO 30 JUNE 1997

Particulars	Unit	
Property recovered	\$	7 056 989
Drugs seized	\$	30 808 660
Arrests	no.	3 262
Charges	no.	14 648

The Crime Stoppers telephone line guarantees the anonymity of the caller who is given a code number at the time of calling.

Callers may be entitled to reward of up to \$1,000 for information that results in an arrest.

Crime Stoppers aims to make Victoria a safer and more secure place by actively involving the community in the fight against crime.

July 1997 saw Victoria Police Crime Stoppers achieve its highest number of monthly arrests since inception, with 62 people arrested for 207 criminal offences. In addition, over \$75,000 in property and over \$290,000 in drugs was seized during this period.

Source: Victorian Crime Stoppers Ltd.

COMMUNITY SATISFACTION WITH POLICE SERVICES

The National Survey of Community Satisfaction with Police Services was included in the Population Survey Monitor (PSM) during 1996. The PSM is a household survey conducted by the ABS every quarter which collects information from about 3,000 households Australia wide. One person aged 18 years or over was asked to respond to the survey from each of the selected households.

The Survey of Community Satisfaction with Police Services provides information on attitudes towards services provided by the police and perceptions on fear of crime and problems in the neighbourhood area. It also provides information on the most recent contact with the police, who initiated the contact and reasons for contact.

Services provided by the police

About three quarters of Victorians aged 18 years and over were generally satisfied/very satisfied with services provided by police (76%) and the job that police were doing in supporting community programs (76%). However, only 63% of the population had similar satisfaction levels towards police in dealing with public order problems.

In general, females were more satisfied with services provided by police than males. Males aged 18 to 24 had the lowest level of satisfaction compared with males in other age groups. The level of satisfaction increased with age.

Fear of crime and personal safety

The majority of Victorians felt safe/very safe staying at home alone. The level of fear was greater after dark (80% felt safe/very safe) than during the day (93% felt safe/very safe), especially for females and older people.

The level of personal safety during such activities as walking or jogging locally and travelling on public transport was found to be significantly different during the day compared with after dark. 89% of people felt safe/very safe walking or jogging during the day, and 78% felt safe/very safe using public transport. In contrast, only one quarter of the population felt safe/very safe to travel on public transport after dark and 39% felt safe/very safe walking or jogging locally after dark.

Safe driving

The majority of Victorians aged 18 years and over (86%) had driven a motor vehicle in the previous 12 months. Of these people, 11% believed that they had always/most of the time driven 10 kilometres per hour or more over the speed limit and 9% believed that they had sometimes been over the 0.05 alcohol limit when they drove a car. Victorians felt that wearing a seat belt was one of the most important safety protections, with 93% of people indicating that they always wore a seat belt when travelling by car.

AUSTRALIAN COURT SYSTEM

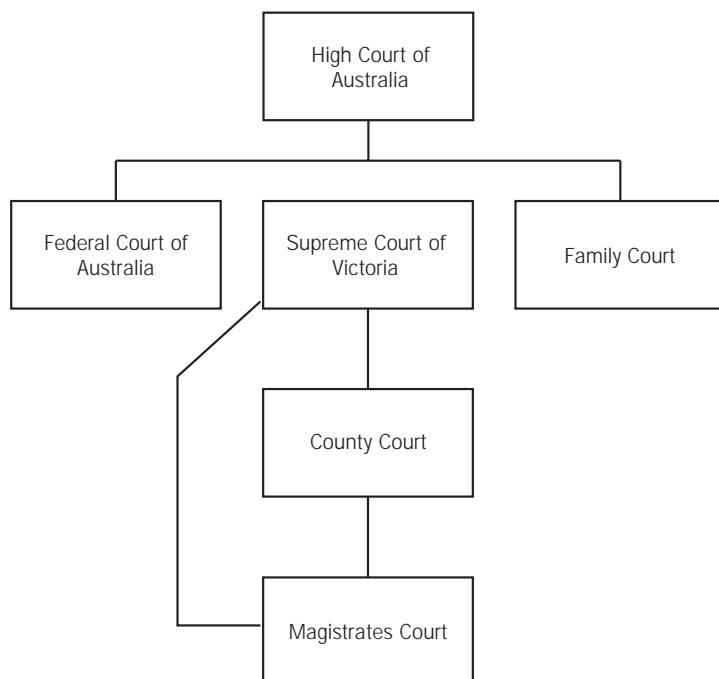
In all States and Territories, two systems of criminal justice exist: the federal criminal justice system, based on offences against Commonwealth laws, and the relevant State system, based on offences against State/Territory laws. It is the statute law and the common law of the States and Territories that primarily governs the day-to-day lives of most Australians.

With respect to the criminal law, the States and Territories have powers to enact their own criminal law, while the Commonwealth has powers to enact laws including sanctions for criminal offences in relation to its responsibilities under the constitution. Thus, in effect, there are nine different systems of criminal law in existence in Australia.

The diagram below illustrates the basic structure of the court system. In Victoria, criminal cases involving less serious offences are heard by the Magistrates' Court, as are less serious civil and family law cases. The County Court hears more serious criminal cases and civil cases involving larger claims. The County Court also hears cases on appeal from the Magistrates' Court. The Supreme Court of Victoria hears the most serious criminal and civil cases and appeals from the County and Magistrates' Court.

The Federal Court of Australia hears cases relating to Commonwealth (as opposed to State) law, such as cases involving trade practices and bankruptcy. There is also a federal Family Court which hears cases under the Family Law Act. Finally, the High Court of Australia acts as the final court of appeal for all criminal, civil and family law matters from lower courts within Australia.

STRUCTURE OF THE COURT SYSTEM



Source: Department of Justice, Victoria, Annual Report 1995-96.

Higher Criminal Courts

At the start of 1995 there were 1,169 defendants who had cases outstanding in the Supreme and County courts that were still pending (see Table 8.8 below). During 1995 there were a further 1,578 defendants who had cases initiated in the higher criminal courts. These defendants together with those pending at the start of the year represent a total workload of 2,747 defendants before the higher courts. Of this total workload, some 1,700 defendants were finalised during 1995.

The defendants pending at the start of 1995 together with those initiated during 1995 less those finalised during the year, gives some 1,047 defendants with cases unfinalised at the end of the year. This represents a 10% decline in the number of defendants pending compared to the start of 1995.

8.8 DEFENDANTS INITIATED, FINALISED AND PENDING, VICTORIA, 1995

Status	Supreme Court no.	County Court no.	Total Higher Courts no.
Pending at start	52	1 117	1 169
Initiated	112	1 466	1 578
Finalised	100	1 600	1 700
Pending at end	64	983	1 047

Source: *Australian Criminal Courts, 1995* (Cat. no. 4513.0).

Table 8.9 shows that of the 1,700 defendants finalised in the higher criminal courts during 1995 some 1,545 defendants were finalised as a result of their charges being adjudicated (e.g. guilty verdict, proven not guilty or pleaded guilty). For these adjudicated defendants 26% went through trial (with 47% found guilty) and 74% pleaded guilty.

8.9 DEFENDANTS FINALISED, BY METHOD OF FINALISATION, VICTORIA, 1995

Method of finalisation	Supreme Court no.	County Court no.	Total Higher Courts no.
Proven not guilty	17	194	211
Proven guilty			
Guilty verdict	25	162	187
Guilty plea	41	1 106	1 147
Total proven guilty	66	1 268	1 334
Transfer between court levels	9	6	15
Non-adjudicated			
Bench warrant issued	—	19	19
Withdrawn(a)	8	113	121
Total non-adjudicated	8	132	140
Total defendants finalised	100	1 600	1 700

(a) Withdrawn includes defendants who were withdrawn by the prosecution, died, were unfit to plead or were finalised by some other non-adjudicated method.

Source: *Australian Criminal Courts, 1995* (Cat. no. 4513.0).

In 1995 the median duration from initiation to finalisation for defendants in the higher criminal courts was 22.8 weeks, see Table 8.10 below. The median duration time in the Supreme court was a month longer than in the County court. The median duration varied according to the methods by which defendants were finalised. For example, in the County court the median duration of cases for defendants finalised by pleading guilty, was half that of those defendants who went to trial and were proven not guilty or guilty.

8.10 MEDIAN DURATION TO FINALISATION FOR DEFENDANTS, VICTORIA, 1995

Method of finalisation	Supreme Court weeks	County Court weeks	Total Higher Courts weeks
Proven not guilty	26.0	36.9	35.2
Guilty verdict	35.8	38.9	38.0
Guilty plea	20.3	17.1	17.3
Other finalisation(a)	17.0	36.3	35.7
Total defendants finalised	26.4	22.4	22.8

(a) Defendants who were transferred to another level of court or where the charge/s are unadjudicated (e.g. the charge/s are withdrawn by the prosecution, the defendant dies, a bench warrant is issued, the defendant is deemed unfit to plead).

Source: *Australian Criminal Courts, 1995* (Cat. no. 4513.0).

Legal services

In addition to the courts there are a number of other agencies involved in the judicial process. These include legal representatives for the prosecution and defence. Prosecution for less serious matters heard before courts of summary jurisdiction, such as the Magistrates Court, is generally carried out by Police Prosecutors, whilst Crown Prosecutors normally handle prosecution of the more serious matters dealt with in the County or Supreme Courts.

For the defendant, legal aid may be available to handle their defence. The objective of the Commonwealth's legal aid scheme is to maximise access to justice by all members of the community. Legal aid services and advice are provided directly by staff lawyers or by way of subsidies to the private legal profession. Assistance is directed to those persons who are most in need by way of merit and means tests.

8.11 LEGAL AID APPLICATIONS AND THEIR OUTCOMES, VICTORIA

Year	Total applications received	Average received per workday	% change	Total assessed(a)	Number approved	Number refused	Refusal rate %
1992-93	40 413	164	-6.3	40 053	30 028	10 025	25.0
1993-94	42 969	175	6.3	41 955	33 565	8 390	20.0
1994-95	48 669	196	13.3	46 998	39 094	7 904	16.8
1995-96	47 759	193	-1.9	46 453	38 361	8 092	17.4
1996-97	39 940	153	-16.3	39 586	32 279	7 307	18.5

(a) Total assessed is less than total applications received, as not all applications are processed.

Source: *Legal Aid Commission of Victoria, Annual Report, 1996-97*.

Table 8.11 above shows that in 1996-97, 39,940 applications for legal aid were received, an average of 153 per workday, representing a decrease of 16% from the previous twelve months. Of these 39,586 were assessed with a refusal rate of 18%. Of the applications assessed criminal cases accounted for 61%, family cases for 26% and civil cases for 13%.

Sentencing by criminal courts

In 1996 the Magistrates' Court handed down 82,452 sentences as shown in Table 8.12 below. Of these 78,169 or 95% were in the form of a non-custodial or other type of order. The most common non-custodial sentence handed down by the Magistrates' Court was a fine (accounting for 48% of non-custodial sentences) followed by suspension or cancellation of licence (21%) and bonds (18%).

Generally the percentage of custodial sentences delivered is greater in the Higher Courts, reflecting the more serious nature of cases heard before the County and Supreme Courts. In Victoria in 1996, 47% of sentences handed down in the Higher Courts were custodial. The most common form of non-custodial sentence in the higher courts was a suspended sentence of imprisonment.

8.12 SENTENCES IMPOSED BY CRIMINAL COURTS, VICTORIA, 1996

Penalties	Magistrates court no.	Higher courts no.
Custodial		
Imprisonment	3 992	539
Youth training centre	291	28
Non-custodial		
Suspended sentence of imprisonment	4 340	360
Intensive correction order	991	37
Community based order	5 043	87
Licence cancelled or suspended	15 499	..
Fine	36 254	43
Adjourned undertakings/Commonwealth Bonds	13 293	74
S28(a)	145	..
Other		
Convicted and discharged	2 417	..
Drug and alcohol test	187	9
Other	..	28
Total	82 452	1 205

(a) Suspended sentences under S28 of the Alcohol and Drug Dependant Persons Act.

Source: Department of Justice, Caseflow Analysis Section—Sentencing Statistics, Magistrates' Courts Victoria, 1996, and Department of Justice, Caseflow Analysis Section—Sentencing Statistics, Higher Criminal Courts Victoria, 1996.

CORRECTIVE SERVICES

Victorian Prisoner Population

The average daily number of prisoners in Victoria for March 1997 was 2,310, with about 85% of these being sentenced prisoners.

At the time of the most recently published Prison Census on 30 June 1995, there were 2,467 prisoners in Victoria. Sentenced prisoners represented 85.9% of all Victorian prisoners, with the remaining 14.1% of prisoners in gaol either awaiting the outcome of their court hearing or awaiting deportation.

The Victorian prison population increased by 40.7% over the 13 years from 1982 to 1995. The sentenced prisoner population increased by 34.3% and the remand population nearly doubled in size (98.3%) over the same period. The most significant increase in both the total and sentenced prisoner populations was recorded in 1983 when, compared with 1982, these populations increased by 13.9% and 15.8% respectively. The most significant increase in the remand population was recorded in 1987 when this population rose by 21.8%, compared with 1986.

8.13 PRISON POPULATION, VICTORIA, 1982-95

At 30 June	Prisoners		Sentenced		Remandees	
	no.	rate(a)	no.	rate(a)	no.	rate(a)
1982	1 753	66.1	1 577	61.0	176	6.8
1983	1 996	73.4	1 826	73.5	170	6.8
1984	1 845	67.5	1 665	62.5	180	6.8
1985	1 879	69.6	1 654	61.2	225	8.3
1986	1 955	71.3	1 749	63.8	206	7.5
1987	1 956	62.5	1 705	54.5	251	8.0
1988	2 071	66.2	1 811	57.9	260	8.3
1989	2 256	69.4	1 956	60.2	300	9.2
1990	2 316	69.9	1 954	59.0	362	10.9
1991	2 310	69.8	1 925	58.1	385	11.6
1992	2 277	67.4	1 913	56.6	364	10.8
1993	2 272	67.0	1 982	58.4	290	8.6
1994	2 522	73.9	2 189	64.2	333	9.8
1995	2 467	71.8	2 118	61.6	349	10.2

(a) Rate per 100,000 adult population.

Source: *Australian Prisoners Results of the National Prison Census, Australian Institute of Criminology, 1982 to 1993: Prisoners in Australia, 1994 and 1995—Results of the National Prison Census—Report by the ABS to the Corrective Services Ministers' Council*.

Sentenced prisoners include those prisoners who were under sentence, awaiting appeal or unfit to plead at the time of the census and have been classified according to their most serious offence. The number of sentenced prisoners in Victoria on 30 June 1995 was 2,118, representing 13.7% of all sentenced prisoners in Australia at the time.

Violent and sexual offences accounted for 49.5% of offences for which sentenced prisoners were in gaol in Victoria on 30 June 1995. This is slightly higher than the Australian figure (48.2%) for the same offences. One quarter (25.5%) of sentenced prisoners in Victoria were convicted of property offences, including, break and enter, fraud and misappropriation, receiving and other theft. Victorian prisoners convicted of drug offences accounted for 9.6% of all sentenced prisoners in Victoria on 30 June 1995. This is slightly lower than the corresponding Australian figure (11.1%) for drug offences.

8.14 SENTENCED PRISONERS BY MOST SERIOUS OFFENCE(a), VICTORIA AND AUSTRALIA, 1995

	Victoria		Australia	
	no.	%	no.	%
Homicide				
Murder	206	9.7	995	6.4
Other homicide	63	3.0	453	2.9
Assault	154	7.3	1 775	11.5
Sex offences	353	16.7	2 090	13.5
Other against person	54	2.5	167	1.1
Robbery	211	10.0	1 933	12.5
Extortion	7	0.3	40	0.3
Break and enter	221	10.4	2 032	13.2
Fraud & misappropriation	94	4.4	700	4.5
Receiving	16	0.8	280	1.8
Other theft	209	9.9	1 035	6.7
Property damage(b)	21	1.0	227	1.5
Government security(c)	168	7.9	942	6.1
Possession of weapon	—	—	32	0.2
Other against good order	20	0.9	67	0.4
Possession/use of drugs	15	0.7	149	1.0
Deal/traffic drugs	187	8.8	1 351	8.8
Manufacture/grow drugs	2	0.1	194	1.3
Driving offences	18	0.8	591	3.8
Licence/registration offences	91	4.3	296	1.9
Other traffic offences	5	0.2	8	0.1
Other offences	3	0.1	70	0.5
Offences in custody	—	—	2	—
Total	2 118	100.0	15 429	100.0

(a) The most serious offence is the offence for which the prisoner has received the longest sentence. Where sentences are equal, or the longest sentence cannot be determined, the most serious offence is the offence with the lowest Australian National Classification of Offences (ANCO) code. (b) Property damage also includes environmental offences. (c) Government security also includes justice procedures.

Source: *Australian Prisoners Results of the National Prison Census, Australian Institute of Criminology, 1982 to 1993. Prisoners in Australia, 1994 and 1995—Results of the National Prison Census—Report by the ABS to the Corrective Services Ministers' Council*.

Private prisons

The New Prisons Project (NPP) is a major government infrastructure project involving the replacement of the State's ageing prisons with new facilities developed, owned and operated by the private sector.

In 1996 the Metropolitan Women's Correctional Centre at Deer Park was opened. A further two private prisons, Fulham Correctional Centre and Port Phillip Prison were opened in 1997.

When all three new private prisons are commissioned approximately 45% of Victoria's prisoners will be accommodated in private prisons with the remainder in the ongoing public prison system.

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Victorian Crime Stoppers Ltd

Australian Prisoners, Results of the National Prison Census, Australian Institute of Criminology, 1982 to 1993

Chapter 9

Commerce

Photo:

Southbank precinct with boats on river

Delete keylines

OVERVIEW

The Retail industry is a major contributor to the Victorian economy, accounting for almost \$28.8 billion annually in turnover and over 300,000 of the State's employees. Data from the Monthly Retail Trade survey are included in this chapter, supplemented by information from the Retail Census.

Prices are a key factor in the operation of an economy. Price Indexes provide summary measures of the movements in various categories of prices and are used extensively to analyse and monitor price behaviour and to adjust government payments such as pensions. The Consumer Price Index, together with the two price indexes relating to Materials Used in Building and the House Price Indexes are covered in this chapter.

Estimates of the level and patterns of expenditure by households in different regions of Australia are derived from the Household Expenditure Survey. This information provides a platform for the CPI; from the survey results items are selected for inclusion in the CPI and relative 'weights' are established between items.

Monthly Retail Trade Survey

The monthly Retail Trade Survey has been conducted in various forms since 1962. The principal objective of the collection is to show the month to month movement of retail turnover. The survey is one of the main economic indicators, providing an 'early' indication of changes in the economic climate. Retail spending is also a very important component of the Australian National Accounts, contributing around 40% of Private Final Consumption Expenditure (PFCE).

Industry analysis

In Victoria, in the retail industry, total turnover increased by 5.0% between 1995–96 and 1996–97, with Clothing and soft goods retailing (–1.1%) and the Hospitality and services group (–0.3%) being the only industry groups to show a decline.

Department stores increased turnover by 1.6% between 1995–96 and 1996–97, down on the 4.9% growth of the previous twelve months. Food retailing, which grew by 6.2%, is the largest industry group, contributing 43 per cent of total retail turnover. The industry to show the strongest growth in 1996–97 was Household goods retailing (9.8%). The next strongest increase (7.8%) was in Other retailing (which includes pharmacies, second-hand stores, nurseries and jewellers). The increase in Recreational goods retailing (5.7%) was again down on the growth recorded in previous years.

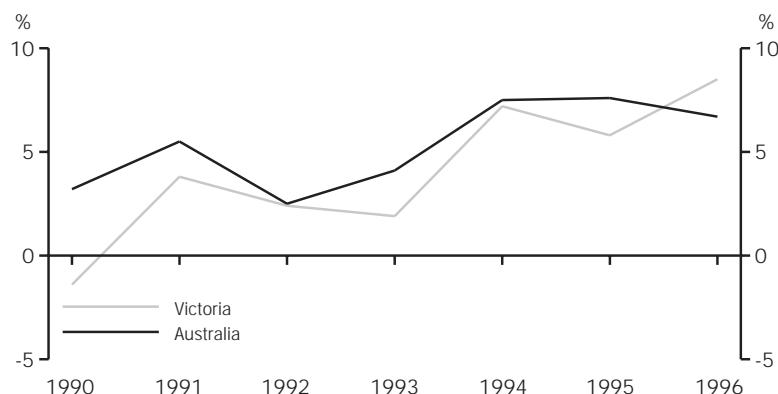
9.1 TURNOVER OF RETAIL ESTABLISHMENTS(a) AT CURRENT PRICES BY INDUSTRY, VICTORIA

Industry group	1991–92 \$m	1992–93 \$m	1993–94 \$m	1994–95 \$m	1995–96 \$m	1996–97 \$m
Food	9 725.6	9 856.8	9 989.7	10 723.8	11 738.0	12 467.6
Department stores	2 423.9	2 507.3	2 468.5	2 554.4	2 680.4	2 724.0
Clothing and soft goods	2 157.4	2 140.1	1 965.6	1 873.0	1 828.5	1 807.6
Household goods	2 837.8	3 089.7	3 160.0	3 169.6	3 392.9	3 727.5
Recreational goods	1 096.4	1 106.3	1 227.0	1 517.0	1 682.7	1 778.7
Other retailing	1 803.1	1 973.0	2 202.5	2 509.4	2 526.3	2 723.8
Hospitality and services	3 111.0	3 037.8	3 158.6	3 571.8	3 576.1	3 564.1
Total	23 155.2	23 711.0	24 171.9	25 919.0	27 424.9	28 793.3

(a) Excludes establishments which retail motor vehicles, parts, petrol etc. but includes non-petrol sales of identified convenience stores of petrol stations.

Source: *Retail Trade Australia* (Cat. no. 8501.0).

PERCENTAGE CHANGE IN RETAIL TURNOVER, VICTORIA AND AUSTRALIA



Source: *Retail Trade, Australia* (Cat. no. 8501.0).

9.2 QUARTERLY TURNOVER OF RETAIL ESTABLISHMENTS, SEASONALLY ADJUSTED(a) AT CURRENT PRICES BY INDUSTRY, VICTORIA

Industry group	March 1996 \$m	June 96 \$m	Sept 96 \$m	Dec 96 \$m	Mar 1997 \$m	June 97 \$m
Food	2 962.5	2 989.1	3 013.1	3 076.4	3 194.7	3 208.1
Department stores	669.3	665.3	677.5	669.5	721.3	660.2
Clothing and soft goods	455.1	447.2	446.0	449.0	461.0	454.3
Household goods	846.4	874.9	900.2	903.5	976.9	955.7
Recreational goods	447.3	411.1	410.7	464.1	438.8	454.9
Other retailing	622.9	609.4	634.6	670.4	700.4	725.6
Hospitality and services	898.7	917.0	869.4	878.0	930.0	891.6
Total	6 902.2	6 914.1	6 951.6	7 111.0	7 423.0	7 350.6

(a) Excludes establishments which retail motor vehicles, parts, petrol etc. but includes non-petrol sales of identified convenience stores of petrol stations.

Source: *Retail Trade Australia* (Cat. no. 8501.0).

Growth in the estimate of seasonally adjusted retail turnover continued to strengthen during most of 1996-97, although there was a decline in the June quarter 1997. Retail turnover in four of the seven industry groups declined in this quarter.

1991-92 Retail Census

At 30 June 1992 there were 44,882 shopfront retailing locations operating in Victoria (about one quarter of the Australian total) which occupied floorspace of 9.3 million square metres. During 1991-92 these locations recorded turnover of \$23.7 billion, which was \$5,338 per head of population, slightly below the Australian average of \$5,463 per head.

There were 266,346 people employed in shopfront retailing locations in Victoria. The turnover per person employed was about \$89,000, slightly below the national average.

In Victoria, \$11.5 billion (48% of the total shop front retailing turnover) was spent in Personal and household goods retailing outlets and a further \$10.5 billion (44%) in Food retailing stores. The remaining expenditure of \$1.7 billion (7%) was on selected personal services.

Photo:

Melbourne Central

Delete keylines

Direct comparison of the 1991–92 census with the 1979–80 and 1985–86 censuses was not possible due to differences in scope and coverage and because a revised industry classification was used in 1991–92.

9.3 RETAILING VICTORIA, 1991–92

Description	Locations at 30 June no.	Persons employed			Wages and salaries \$m	Turnover \$m	Turnover per person employed \$
		Full-time no.	Part-time no.	Total no.			
Food retailing	14 552	54 326	54 857	109 183	982	10 458	784
Personal and household goods retailing	20 896	63 357	48 137	111 494	1 351	11 482	102 979
Selected personal services	9 434	26 925	18 744	45 669	415	1 739	38 078
Total shopfront retailing	44 882	144 608	121 738	266 346	2 748	23 678	88 901
Motor vehicle retailing and services	9 448	42 266	7 780	50 046	833	9 653	192 888

Source: *Retailing in Victoria* (Cat. no. 8623.2).

The Consumer Price Index

Price Indexes measure the changes in prices over time of a constant list of goods and/or services. The items are allocated 'weights' which represent their relative consumer importance. From time to time indexes are reviewed and new fixed weights are introduced to reflect up-to-date expenditure patterns.

9.4 CONSUMER PRICE INDEX, ALL GROUPS, EIGHT CAPITAL CITIES(a)

Year	Eight capitals (b)	Sydney	Melbourne	Brisbane	Adelaide	Perth	Hobart	Darwin	Canberra
1991-92	107.3	106.7	108.1	107.0	108.9	105.9	107.1	108.0	107.8
1992-93	108.4	107.7	108.9	108.5	111.2	106.2	108.5	109.5	109.5
1993-94	110.4	109.2	111.1	110.6	113.4	108.5	111.7	111.5	111.4
1994-95	113.9	113.0	114.1	114.7	116.9	112.3	115.2	114.7	115.1
1995-96	118.7	118.7	118.4	119.1	121.2	116.7	119.6	119.5	120.3
1996-97	120.3	120.4	119.9	121.0	122.3	118.3	121.4	121.6	121.2
ALL GROUPS PERCENTAGE CHANGES									
1991-92	1.9	1.7	2.2	2.0	2.5	0.8	2.1	2.2	2.6
1992-93	1.0	0.9	0.7	1.4	2.1	0.3	1.3	1.4	1.6
1993-94	1.8	1.4	2.0	1.9	2.0	2.2	2.9	1.8	1.7
1994-95	3.2	3.5	2.7	3.7	3.1	3.5	3.1	2.9	3.3
1995-96	4.2	5.0	3.8	3.8	3.7	3.9	3.8	4.2	4.5
1996-97	1.3	1.4	1.3	1.6	0.9	1.4	1.5	1.8	0.7

(a) Base year: 1989-90=100.0

Source: Consumer Price Index (Cat. no. 6401.0).

Prices of all goods and services are sought to be measured at constant quality, thus identifying 'pure' price movement. To do this, identical or equivalent items are priced in successive time periods as far as possible. Changes in quality are taken into account to ensure that the price indexes reflect only pure price change.

The Consumer Price Index is sometimes referred to as a measure of inflation, a measure of changes in purchasing power or a measure of changes in the cost of living. It is in fact, 'a measure of change, over time, in the retail prices of a constant basket of goods and services'.

In 1996-97, the all groups Consumer Price Index for Melbourne stood at 119.9 (base year 1989-90=100.0). The annual increase in the Melbourne CPI was 1.3%, with the highest rise being in the Health and personal care group (5.6%). The increase in the Melbourne CPI between 1991-92 and 1996-97 was 10.9%, with the largest increases being in Tobacco and alcohol (35.7%) and Health and personal care (24.4%). The Housing group showed a decrease over this period of -3.9% and an annual decrease of -6.3%.

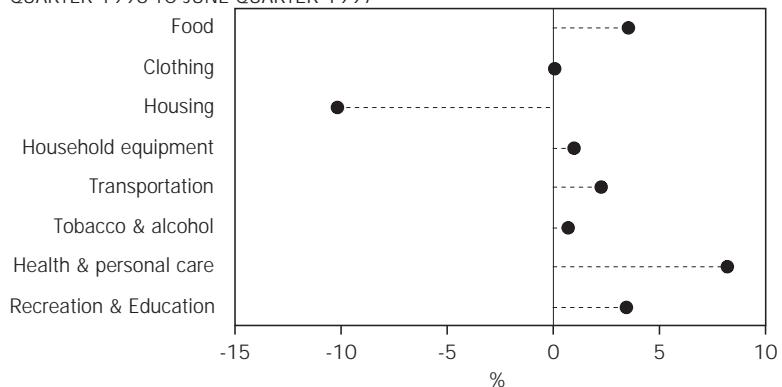
9.5 CONSUMER PRICE INDEX, MELBOURNE(a)

Group	1991-92	1992-93	1993-94	1994-95	1995-96	1996-97	Percentage change		
							1991-92 to 1996-97	1995-96 to 1996-97	
Food	104.9	106.3	107.9	110.1	114.1	118.6	13.1	3.9	
Clothing	106.8	107.8	107.3	107.4	108.0	108.4	1.5	0.4	
Housing	98.9	93.1	92.7	97.5	101.4	95.0	-3.9	-6.3	
Household equipment	108.3	108.3	110.0	111.1	113.0	114.7	5.9	1.5	
Transport	109.8	112.7	115.8	118.8	122.6	124.0	12.9	1.1	
Tobacco and alcohol	116.8	122.7	132.1	137.3	154.2	158.5	35.7	2.8	
Health and personal care	126.3	129.8	135.4	142.4	148.7	157.1	24.4	5.6	
Recreation and Education	108.6	110.8	113.6	116.7	120.3	123.3	13.5	2.5	
All groups	108.1	108.9	111.1	114.1	118.4	119.9	10.9	1.3	

(a) Base year: 1989-90=100.0.

Source: Consumer Price Index (Cat. no. 6401.0).

CONSUMER PRICE INDEX, PERCENTAGE CHANGE BY GROUP, VICTORIA, JUNE QUARTER 1996 TO JUNE QUARTER 1997



(a) Base year: 1989-90 = 100.0

Source: Consumer Price Index (Cat. no. 6401.0).

Average retail prices

Over the five years to June 1997, the rate and direction of prices changes of food and other items have differed markedly. For some items such as milk, prices have steadily increased, whilst for other items such as beef, prices have dropped.

Photo:

Shopping centre strip

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9.6 AVERAGE RETAIL PRICES OF SELECTED FOOD AND OTHER ITEMS, MELBOURNE

Item	Unit	June quarter					
		1992 cents	1993 cents	1994 cents	1995 cents	1996 cents	1997 cents
Dairy products							
Milk, carton, supermarket sales	1 litre	96	101	104	113	121	130
Cheese, processed, sliced, wrapped	500g	329	302	349	337	373	357
Butter	500g	182	178	184	164	194	199
Cereal products							
Bread, white loaf, sliced, supermarket sales	680g	159	160	153	160	174	192
Flour, self-raising	2kg	302	303	315	330	342	340
Meat and Seafoods							
Beef							
Rump steak	1kg	1 124	1 057	1 102	1 120	1 116	1 033
Chuck steak	1kg	633	586	623	594	607	547
Lamb							
Leg	1kg	512	554	549	558	597	577
Loin chops	1kg	746	783	792	801	900	859
Chicken, frozen	1kg	328	291	323	321	348	387
Bacon, middle rashers	250g pkt	284	287	293	286	302	308
Salmon, pink	210gm can	234	261	232	221	226	227
Fruit and vegetables							
Potatoes	1kg	82	95	70	137	99	130
Onions	1kg	66	127	100	103	87	88
Peaches, canned	825g	190	197	203	198	179	186
Oranges	1kg	135	114	105	124	142	139
Other food							
Eggs	55g dozen	178	190	200	196	245	271
Sugar, white	2kg	174	171	199	192	202	201
Jam, strawberry	500g jar	224	226	247	233	240	245
Tea	250g	167	171	182	177	176	193
Coffee, instant	150g jar	425	402	428	561	569	554
Margarine, poly-unsaturated	500g	160	153	159	163	141	144
Other items							
Beer, full strength, unchilled	24 x 375ml bottles	2 252	2 280	2 395	2 469	2 608	2 665
Pet food	410g	87	92	93	91	94	99
Laundry detergent	1kg	442	439	429	439	484	498
Toilet soap	2 x 125 gm	152	156	159	165	165	159
Petrol, super grade	1 litre	67.2	66.5	70.2	71.1	74.1	73.5

Source: Average Retail Prices of Selected Items, Eight Capital Cities (Cat. no. 6403.0).

Imported items

Since 1991–92 the price of wholly or predominantly imported goods included in the CPI increased by 7.1% (weighted average of the eight capital cities). By comparison the price of non-imported goods increased by 12.2% over the same period. The annual change between 1995–96 and 1996–97 was –0.9% for imported goods and 1.7% for non-imported goods.

9.7 CONSUMER PRICE INDEX IMPORTED AND NON-IMPORTED ITEMS, WEIGHTED AVERAGE OF EIGHT CAPITAL CITIES(a)

	Imported items			Non-imported items			All Groups
	Motor vehicles	Other goods	Total goods	Goods	Services	Total	
1991-92	105.1	102.0	103.1	108.5	106.7	107.9	107.3
1992-93	111.0	103.4	105.1	111.5	105.4	109.0	108.4
1993-94	119.7	105.6	108.5	114.0	106.3	110.9	110.4
1994-95	130.3	106.6	110.5	116.5	111.3	114.4	113.9
1995-96	133.5	107.7	111.4	121.1	117.0	119.2	118.7
1996-97	124.3	108.1	110.4	124.2	117.8	121.2	120.3

(a) Base year: 1989-90=100.0.

Source: *Average Retail Prices of Selected Items, Eight Capital Cities (6403.0)*.

Producer price indexes

During the 1960s, the ABS began producing a range of price indexes covering materials used and articles produced by defined sectors of the Australian economy. The following Producer Price Indexes (previously known as Wholesale Prices Indexes) were published monthly until June 1997. From September quarter 1997 they are being published quarterly. Price Index of Materials Used in House Building; Price Index of Materials Used in Building Other Than House Building; Price Indexes of Materials Used in Manufacturing Industries; Price Indexes of Articles Produced by Manufacturing Industry; Price Indexes of Copper Materials; Import Price Index; Export Price Index; and Price Indexes of Materials Used in Coal Mining. Only the Building Indexes are produced on a State basis, while the remaining Indexes are produced on a national basis.

Materials Used in House Building

The Materials Used in House Building Index measures changes in prices of selected materials used in the construction of houses in each capital city Statistical Division. A house is defined as a detached building predominantly used for long term residential purposes and consisting of only one dwelling unit. The index does not purport to represent buildings of any kind other than detached houses.

The All Groups index number for the Price Index of Materials Used in Housing Building for Melbourne in 1996-97 was 115.3, a 0.1% decrease on 1995-96. The weighted average of the six state capital cities increased by 0.3% for the same period.

9.8 PRICE INDEX OF MATERIALS USED IN HOUSE BUILDING, MELBOURNE AND OTHER CAPITAL CITIES, ALL GROUPS(a)

	1991-92	1992-93	1993-94	1994-95	1995-96	1996-97
Melbourne	102.8	105.7	112.1	115.9	115.4	115.3
Sydney	105.0	106.8	111.3	115.0	115.9	116.3
Brisbane	107.9	110.2	113.5	115.9	115.1	115.3
Adelaide	104.5	106.3	117.1	118.8	118.2	120.6
Perth	106.0	106.9	109.1	112.7	114.7	115.3
Hobart	108.0	109.9	112.8	117.3	120.7	120.2
Weighted average of six State capital cities	104.9	106.9	112.0	115.4	115.7	116.1

(a) Base year: 1989-90=100.0.

Source: *Price Index of Materials Used in House Building, Six State Capital Cities and Canberra (Cat. no. 6408.0)*.

Materials Used in Building Other than House Building

This index measures changes in prices of selected materials used in the construction of buildings (other than houses) in the Melbourne metropolitan area. The building types directly represented in the index include flats, hotels and motels, shops, factories, offices, schools etc.

The 1996-97 All Groups index number for Melbourne, was 110.9. This represented a -0.2% decrease over 1995-96. For the weighted average of the six State Capital Cities, the increase recorded was 0.4%.

Prices for some materials used in building other than house building decreased in 1996–97. Decreases in Melbourne occurred in structural timber (–5.2%), ready mixed concrete (–6.0%), and all electrical materials (–6.2%). These price reductions were contrasted by increases in other materials, the largest increases occurring in paint and other coatings (3.3%) and fabricated steel products (3.2%).

9.9 PRICE INDEX OF MATERIALS USED IN BUILDING OTHER THAN HOUSE BUILDING, MELBOURNE(a)

Selected major materials	1991–92	1992–93	1993–94	1994–95	1995–96	1996–97
Structural timber	97.2	103.2	119.5	123.0	116.1	110.1
Clay bricks	106.9	108.5	109.3	112.3	112.1	113.1
Ready mixed concrete	94.0	108.2	123.4	124.2	118.6	111.5
Precast concrete products	102.8	99.5	99.2	104.8	108.1	110.3
Steel decking, and cladding	107.5	109.0	104.7	106.5	109.9	109.2
Structural steel	93.3	91.3	93.3	95.3	100.9	104.2
Reinforcing steel bar, mesh, etc.	97.3	99.2	102.0	101.8	102.7	100.7
Aluminium windows	96.4	96.0	96.5	98.8	100.8	100.6
Fabricated steel products	109.5	108.4	109.4	110.7	113.1	116.7
Builders' hardware	112.6	117.2	116.2	113.7	114.5	116.5
Sand, and aggregate	119.0	113.8	119.5	118.5	114.6	115.9
Carpet	100.4	98.8	98.3	98.5	101.6	101.6
Paint and other coatings	119.2	118.8	125.0	131.2	141.2	145.8
Non-ferrous pipes and fittings	89.4	90.9	86.5	100.8	112.2	111.5
All groups excluding electrical materials and mechanical services	101.8	103.4	106.6	108.5	109.7	110.0
All electrical materials	110.7	108.9	107.3	113.5	119.4	112.0
All mechanical services	105.6	105.5	106.8	108.9	114.1	114.9
All plumbing materials	104.1	104.0	105.3	112.6	118.9	120.1
All groups	103.4	104.4	106.7	108.9	111.1	110.9
All groups, weighted average of six State capital cities	105.7	106.0	107.5	110.4	112.7	113.2

(a) Base year: 1989–90=100.0.

Source: *Price Index of Materials Used in Building Other Than House Building, Six State Capital Cities and Canberra (Cat. no. 6407.0)*.

House Price Indexes

These indexes provide estimates of changes in housing prices for the eight capital cities. They measure price movements over time in each city. They do not measure differences in price levels between cities.

In 1996–97 the Price Index for Established Houses for Melbourne increased by 3.9% after experiencing a decrease of –0.6% in 1995–96. The cumulative increase from 1992–93 was 8.9%.

The Project Home Price Index for Melbourne continued to exhibit a slowing of growth, rising by 3.5% between 1992–93 and 1993–94, by 1.8% between 1993–94 and 1994–95, by 1.4% between 1994–95 and 1995–96 and by 0.4% between 1995–96 and 1996–97.

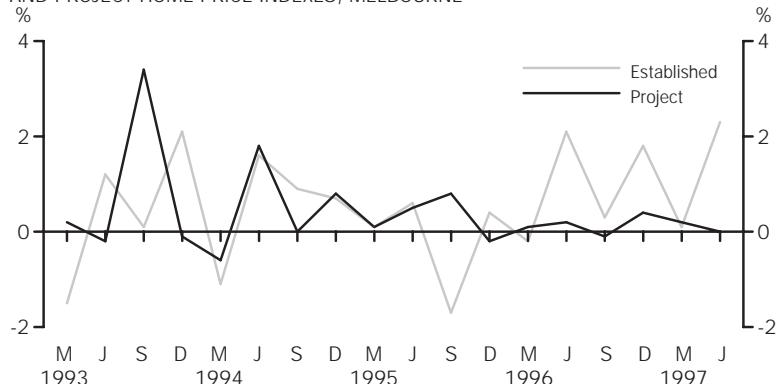
9.10 HOUSE PRICE INDEXES: EIGHT CAPITAL CITIES AND AUSTRALIA(a)(b)

	Established houses					Project homes				
	1992-93	1993-94	1994-95	1995-96	1996-97	1992-93	1993-94	1994-95	1995-96	1996-97
Melbourne	93.1	95.2	97.9	97.6	101.4	100.4	103.9	105.8	107.3	107.7
Sydney	105.3	108.8	113.7	115.8	118.9	103.6	105.8	107.9	110.2	110.4
Brisbane	134.9	138.0	139.3	136.8	137.2	108.8	110.1	112.5	113.7	112.7
Adelaide	110.1	109.1	111.7	108.3	108.2	105.4	111.4	114.6	112.8	108.3
Perth	98.4	104.7	109.0	108.2	109.2	92.8	96.2	100.0	101.6	101.3
Hobart	116.6	122.5	129.0	129.8	128.5	114.1	117.7	121.3	123.4	123.3
Darwin	133.6	155.7	178.1	188.0	196.9	111.4	118.6	125.2	129.9	136.0
Canberra	134.2	134.4	130.4	127.8	126.4	131.8	132.7	129.2	124.7	123.6
Australia (b)	106.0	109.1	112.6	112.7	115.1	103.0	105.8	108.1	109.5	109.2

(a) Base of each index: 1989-90=100.0. (b) Weighted average of eight capital cities.

Source: *House Price Indexes: Eight Capital Cities* (Cat. no. 6416.0).

HOUSE PRICE INDEXES, QUARTERLY PERCENTAGE CHANGE: ESTABLISHED HOUSE AND PROJECT HOME PRICE INDEXES, MELBOURNE



Source: *Household Price Indexes: Eight Capital Cities* (Cat. no. 6416.0).

Household expenditure

Household Expenditure Surveys are primarily conducted in order to measure expenditure patterns of Australian households. These expenditure patterns are then used to establish and revise the weights used in the compilation of the Consumer Price Index.

In 1993-94 the total average household expenditure per week in Victoria was \$601.76, compared with an Australian average of \$602.11.

The four largest items of weekly household expenditure were Food and non-alcoholic beverages an average of \$111.10 per week, Transport (\$93.62 per week), Current housing costs (\$83.11 per week) and Recreation (\$80.65 per week). These items represented respectively 18.5%, 15.6%, 13.8% and 13.4% of Victorian households' average weekly spending. These were also the four largest items of expenditure nationally.

9.11 AVERAGE WEEKLY HOUSEHOLD EXPENDITURE, 1993-94

Commodity or service	Victoria		Australia	
	\$	%	\$	%
Current housing costs (selected dwelling)	83.11	13.8	85.38	14.2
Fuel and power	21.25	3.5	16.77	2.8
Food and non-alcoholic beverages				
Bakery products, flour and other cereals	13.14	2.2	12.74	2.1
Meat and seafood	18.10	3.0	17.91	3.0
Dairy products, eggs, edible oils and fats	11.22	1.9	11.04	1.8
Fruits, nuts and vegetables	13.15	2.2	13.74	2.3
Miscellaneous food	17.57	2.9	18.10	3.0
Non-alcoholic beverages	7.56	1.3	7.98	1.3
Meals out and take-away food	30.34	5.0	29.49	4.9
Alcoholic beverages	16.52	2.7	17.46	2.9
Tobacco	8.67	1.4	9.19	1.5
Clothing and footwear	37.61	6.3	33.71	5.6
Household furnishings and equipment	34.55	5.7	39.56	6.6
Household services and operation	30.49	5.0	31.58	5.2
Medical care and health expenses	26.41	4.4	27.14	4.5
Transport	93.62	15.6	93.58	15.5
Recreation	80.65	13.4	79.34	13.2
Personal care	11.27	1.9	11.37	1.9
Miscellaneous commodities and services	46.51	7.7	46.02	7.6
Total	601.76	100.0	602.11	100.0

Source: Household Expenditure Survey, Australia: States and Territories (Cat. no. 6533.0).

The greatest proportion of expenditure on Food and non-alcoholic beverages went on Meals out and take away food (\$30.34 a week or 27.3%) followed by spending on Meat and seafood (\$18.10 a week or 16.3%), and Miscellaneous food items (\$17.57 a week or 15.8%).

The greatest proportion of money spent on Transport was spent on Motor vehicle fuel, lubricants and additives (\$27.85 per week or 30%) followed by the purchase of Motor vehicles (\$25.37 per week or 27%). Victorian households spent an average of \$15.24 per week on Vehicle registration and insurance. In contrast, only \$3.14 was spent each week on Public transport fares.

Average weekly household expenditure by Victorians was similar to the national average on most items. However, Victorians spent significantly more than the national average on Fuel and power (\$21.25 per week compared with a national average of \$16.77) and Clothing and footwear (\$37.61 compared with \$33.71). The only item on which Victorians spent significantly less than the national average was Household furnishings and equipment (\$34.55 compared with \$39.56).

Although the Victorian average household expenditure on housing of \$83.11 per week was below the national average of \$85.38 per week, Victorians spent more on housing than residents of any other State except NSW. The Northern Territory and the Australian Capital Territory both had total expenditure significantly higher than the States.

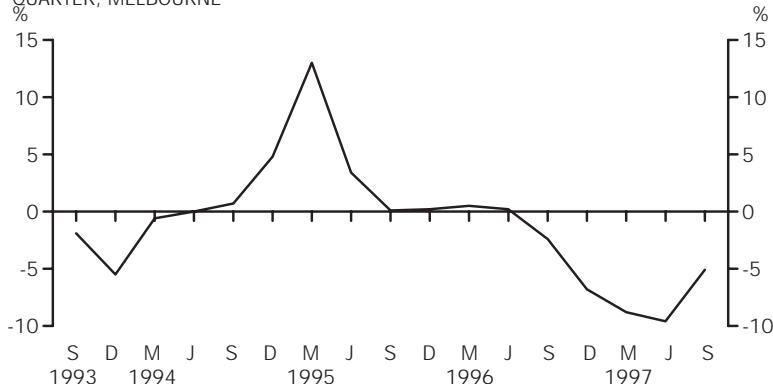
Victorians spent more on Recreation than residents of any other State, although the Northern Territory and the ACT both had significantly higher expenditures. Victorians' expenditure on recreation averaged \$80.65 per week compared with \$78.27 in NSW and \$75.17 in Queensland.

9.12 TOP FOUR HOUSEHOLD EXPENDITURE ITEMS BY STATES AND AUSTRALIA, 1993-94

Commodity or service	NSW	Vic	Qld	SA	WA	Tas	NT	ACT	Aust
	AVERAGE WEEKLY HOUSEHOLD EXPENDITURE (\$)								
Current housing costs (selected dwelling)	95.40	83.11	81.44	70.43	78.02	62.92	116.20	112.29	85.38
Food and non-alcoholic beverages	118.16	111.10	103.32	99.09	108.03	102.10	127.07	126.81	111.00
Transport	94.17	93.62	95.45	83.88	92.10	76.72	93.18	127.73	93.58
Recreation	78.27	80.65	75.17	76.38	78.28	77.98	98.24	102.33	79.34

Source: *Household Expenditure Survey, Australia: States and Territories* (Cat. no. 6533.0).

MORTGAGE INTEREST CHARGES – PERCENTAGE CHANGE FROM PREVIOUS QUARTER, MELBOURNE



Source: *Consumer Price Index* (Cat. no. 6401.0).

Gambling

The development of a data base of statistics on gambling on a national basis was first formally proposed at the 1983 Conference of Government Racing Officials. At the Racing and Gaming Ministers' Conference held later that year, it was resolved that each State and Territory submit all available racing and gaming statistics to the Tasmanian Racing and Gaming Commission for collation and analysis. The Tasmanian Gaming Commission, in association with the Centre for Regional Economic Analysis, University of Tasmania, has continued to compile Australian Gambling Statistics on an annual basis.

9.13 GAMBLING TURNOVER, VICTORIA AND AUSTRALIA, 1995–96

Gambling form	Victoria \$m	Australia \$m	Per capita Victoria(a) \$
TAB	2 283.5	8 739.6	671.86
On-course totaliser	235.1	950.0	69.16
On-course bookmakers	443.3	1 911.3	130.44
Total racing gambling	2 961.9	11 604.3	871.47
Lottery	12.5	163.6	3.67
Tattslotto, lotto	702.8	2 244.1	206.77
Pools	3.5	19.7	1.04
Bingo and minor gambling	188.7	523.5	55.51
Gaming machines	13 367.2	45 194.5	3 933.04
Casino	3 991.8	12 066.1	1 174.52
Instant lottery	72.4	557.8	21.31
Keno	31.3	497.7	9.22
Total gaming	18 370.3	61 267.0	5 405.09
Total all gambling	21 332.2	72 871.3	6 276.56

(a) Excludes all persons under the age of 18 years.

Source: Tasmanian Gaming Commission, *Australian Gambling Statistics 1972–73 to 1995–96*.

It should be noted that in analysing gambling statistics, it is not accurate to make comparisons between turnovers generated by different forms of gambling, except as a single indication of the amount of money wagered on each gambling form.

Photo:

Casino

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Of importance in such a comparative analysis is the conversion of turnover into expenditure. There is expenditure data on casino gaming in all States and the Northern Territory, and for gaming machine (poker machine) operations in Victoria. For other forms of gambling, expenditure is calculated by multiplying the turnover by a certain retention rate which is indicative of the proportion of the original gambling outlay which is not returned to the gambler in the form of winnings. For the various types of gambling, the amounts 'lost' or not returned to the gambler vary significantly.

9.14 GAMBLING EXPENDITURE, VICTORIA AND AUSTRALIA, 1995-96

Gambling form	Victoria \$m	Australia \$m	Per capita Victoria(a) \$
TAB	365.4	1 419.6	107.50
On-course totalisator	37.6	154.5	11.07
On-course bookmakers	26.6	103.3	7.83
Total racing gambling	429.6	1 677.6	126.39
Lottery	5.0	57.7	1.47
Tattslotto, lotto	281.1	897.7	82.71
Pools	1.8	9.9	0.52
Bingo and minor gambling	52.7	226.2	15.52
Gaming machines	1 246.3	4 607.6	366.70
Casino	490.9	1 798.4	144.44
Instant lottery	29.0	215.8	8.52
Keno	6.8	119.9	2.01
Total gaming	2 113.6	7 933.2	621.89
Total all gambling	2 543.2	9 610.7	748.28

(a) Excludes all persons under the age of 18 years.

Source: Tasmanian Gaming Commission, *Australian Gambling Statistics 1972-73 to 1995-96*.

The following table provides an indication of the increase in gambling turnover in Victoria over the four years to 1995-96. Whilst turnover on racing gambling increased by only 2.5% and actually fell between 1994-95 and 1995-96, gaming turnover increased by a massive 392.7%.

9.15 GAMBLING TURNOVER: VICTORIA

Year	Total racing \$m	Total gaming \$m	Total gambling \$m
1993-94	2 945.5	8 205.4	11 150.9
1994-95	2 972.0	14 048.4	17 020.4
1995-96	2 961.9	18 370.3	21 332.2

Source: Tasmanian Gaming Commission, *Australian Gambling Statistics 1972-73 to 1995-96*.

Table 9.16 illustrates the changing market share between racing and gaming in relation to gambling expenditure. It is notable that over the period 1992-93 to 1995-96, the racing share of total gambling expenditure decreased from 37.2% to 16.9%.

9.16 GAMBLING EXPENDITURE, VICTORIA: SHARE OF MARKET

Year	Racing \$m	Gaming \$m	Racing share %	Gaming share %
1993-94	409.2	1 099.8	27.1	72.9
1994-95	412.2	1 703.8	19.5	80.5
1995-96	429.6	2 113.6	16.9	83.1

Source: Tasmanian Gaming Commission, *Australian Gambling Statistics 1972-73 to 1995-96*.

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A Guide to the Consumer Price Index (Cat. no. 6440.0)

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Australian Centre for Retail Studies

Chapter 10

Trade

Photo:

Car transport ship

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OVERVIEW

Under the Australian Constitution, the Commonwealth Government is responsible for legislation relating to trade and commerce with other countries. The Department of Foreign Affairs and Trade is in turn responsible for developing and maintaining Australia's position as a world trading nation through international trade and commodity commitments and agreements, developing export markets, and formulating proposals for the Government on Australia's international trade policy and trading objectives. It is also responsible for matters relating to the commercial development, marketing, and export of minerals and fuels. It employs Trade Commissioners at many overseas centres.

The statistics in this chapter are recorded on a general trade basis, i.e. total exports include both Australian produce and re-exports; total imports comprise goods entered directly for domestic consumption, together with goods imported into customs warehouses.

State statistics for exports comprise State of origin. 'State of origin' is defined as the State in which the final stage of production or manufacture occurs. For imports, the State is that in which the import entry was lodged with the Australian Customs Service.

Both imports to, and exports from Victoria increased in 1996-97, continuing the trend since the 1990-91 recession. Between 1995-96 and 1996-97, imports increased by 2% to \$25,190 million, whilst exports increased by 6% to \$16,288 million. Imports into Victoria in 1996-97 accounted for 32% of Australia's total imports of \$78,977 million, whilst exports from Victoria amounted to 21% of Australia's total exports of \$78,885 million.

10.1 OVERSEAS TRADE: RECORDED VALUES OF IMPORTS INTO, AND EXPORTS FROM, VICTORIA

Year	Imports \$m	Exports \$m	Excess of imports \$m
1991-92	15 353	9 545	5 808
1992-93	18 147	11 044	7 103
1993-94	20 770	12 349	8 420
1994-95	23 967	13 008	10 959
1995-96	24 663	15 410	9 253
1996-97	25 190	16 288	8 902

Source: *International Merchandise Trade, Australia (5422.0)*.

Imports

In 1996-97, almost 65% of Victoria's imports came from seven countries. The major import sources were the United States of America (USA) (\$5,945 million); Japan (\$3,097 million); Germany (\$1,992 million); China, excluding Taiwan (\$1,756 million), Taiwan (\$799 million); the United Kingdom (\$1,634 million) and New Zealand (\$1,247 million).

The major commodities imported into Victoria were Road Vehicles (including air cushion vehicles) (\$2,924 million); General industrial machinery and equipment not elsewhere stated (n.e.s.), and machine parts n.e.s. (\$1,711 million); Electrical machinery, apparatus, and appliances n.e.s., and electrical parts thereof (\$1,572 million); Miscellaneous manufactured articles n.e.s. (\$1,460 million); Machinery specialised for particular industries (\$1,175 million) and Telecommunications and sound recording and reproducing apparatus and equipment. Textile yarn, fabrics, made-up articles, n.e.s., and related products (\$1,066 million).

10.2 IMPORTS FROM MAJOR TRADING PARTNERS, VICTORIA, 1996-97

Description	USA \$m	Japan \$m	Germany \$m
Power generating equipment and machinery	379	71	84
Machinery specialised for particular industries	381	145	171
General industrial machinery and equipment n.e.s. and machine parts n.e.s.	559	272	207
Telecommunications and sound recording and reproducing apparatus and equipment	148	191	62
Electrical machinery, apparatus, and appliances n.e.s., and electrical parts thereof	307	181	189
Road vehicles (including air cushion vehicles)	541	1 313	328
Other transport equipment	519	36	14
Professional, scientific and controlling instruments and apparatus n.e.s.	297	66	87
Photographic apparatus, equipment and supplies and optical goods n.e.s.; watches and clocks	305	44	43
Miscellaneous manufactured articles n.e.s.	347	102	39
Other commodities	2 162	676	698
Total	5 945	3 097	1 922
Percentage of Victorian imports	24%	12%	8%

Source: *Foreign Trade statistics, unpublished data*.

The USA supplied almost a quarter of Victorian imports, with industrial and electrical machinery (Standard International Trade Classification [SITC] numbers 72, 74 and 77) to the value of \$1,247 million constituting the major items. Japan, which supplied 12% of Victorian imports was the major source of road vehicles for the State. Over 40 per cent of Japanese imports were road vehicles, comprising 45% of all road vehicles imported to Victoria. Eight per cent of Victorian imports came from Germany. These were spread over a wide range of commodities of which industrial and electrical machinery (item nos. 72, 74 and 77) and road vehicles were the major import commodities.

Exports

In 1996-97, almost 46% of Victoria's exports went to six countries. The major export destinations were New Zealand (\$2,134 million); Korea (\$2,098 million); Japan (\$1,525 million); the USA (\$956 million); Singapore (\$891 million) and Hong Kong (\$811 million).

The major commodities exported from Victoria in 1996-97 were Dairy products and birds' eggs (\$1,427 million); Textile fibres and their wastes (\$1,193 million); Non-ferrous metals (\$887 million); Road vehicles (including air cushion vehicles) (\$816 million); Petroleum, petroleum products and related materials (\$757 million) and Transport vehicles (excl. road vehicles) (\$666 million).

Photo:

Ships at sea

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Over the two years 1994–95 to 1996–97, Victorian exports increased in most areas. Exports of Office machines and automatic data processing machines rose over 310% (\$74 million in 1994–95 to \$308 million in 1996–97). Other growth areas have been in Transport equipment (excluding road vehicles) (191%); Cereals and cereal preparations (153%); and Dairy products and birds' eggs (25%). Meat and meat preparations exports fell by 15% whilst Non-ferrous metals fell by 13%.

10.3 EXPORTS TO MAJOR TRADING PARTNERS, VICTORIA, 1996–97

Description	New Zealand \$m	Korea \$m	Japan \$m
Meat and meat preparations	6	34	133
Dairy products and birds' eggs	9	16	236
Textile fibres and their wastes (not manufactured into yarn or fabric)	2	74	79
Petroleum, petroleum products and related materials	149	—	2
Non-ferrous metals	31	283	147
Power generating machinery and equipment	24	248	34
Road vehicles (incl. air cushion vehicles)	210	32	10
Transport equipment (excl. road vehicles)	517	—	3
Miscellaneous manufactured articles n.e.s.	80	4	15
Gold, non-monetary (excl. gold ore and concentrates)	5	1 150	50
Other commodities	1 101	257	816
Total	2 134	2 098	1 525
Percentage of Victorian exports	13%	13%	9%

Source: *Foreign Trade statistics, unpublished data*.

Thirteen per cent of Victorian exports were sent to New Zealand, the most significant commodities being Transport equipment (excl. road vehicles) (\$517 million) and Road vehicles (\$210 million). A further 13% of exports were sold to the Republic of Korea, of which 55% (\$1,150 million) comprised gold. Japan was the destination for an additional 9% of Victorian exports. Exports to Japan included a wide variety of commodity items, the most significant being Dairy products and birds' eggs, and Non-ferrous metals, which comprised 15% and 10% respectively.

10.4 OVERSEAS IMPORTS AND EXPORTS, COUNTRIES OF ORIGIN AND CONSIGNMENT

Country	Imports			Exports		
	1994–95 \$m	1995–96 \$m	1996–97 \$m	1994–95 \$m	1995–96 \$m	1996–97 \$m
Austria	89	97	124	9	12	5
Bangladesh	13	12	18	31	47	80
Belgium-Luxembourg	225	253	242	29	74	66
Brazil	167	174	125	61	77	81
Canada	430	453	394	113	101	123
China						
Excluding Taiwan Province	1 575	1 675	1 756	561	641	656
Taiwan Province	811	773	799	631	663	695
Czech Federal Republic	14	11	13	8	5	7
Denmark	114	108	131	8	10	7
Egypt, Arab Republic of	3	3	3	45	120	145
Fiji	39	60	119	127	215	236
Finland	235	239	169	6	9	8
France	487	536	711	173	143	162
French Polynesia	—	—	—	30	28	41
Germany	2 088	1 994	1 922	262	264	280
Greece	24	29	32	4	12	20

...continued

**10.4 OVERSEAS IMPORTS AND EXPORTS, COUNTRIES OF ORIGIN AND CONSIGNMENT —
*continued***

Country	Imports			Exports		
	1994–95 \$m	1995–96 \$m	1996–97 \$m	1994–95 \$m	1995–96 \$m	1996–97 \$m
Hong Kong	205	241	267	565	821	811
India	224	234	231	115	139	239
Indonesia	335	378	513	270	367	426
Iran	6	3	5	29	82	146
Iraq	—	—	—	17	—	6
Ireland	122	146	176	5	10	10
Israel	63	64	65	17	14	14
Italy	717	807	832	263	249	319
Japan	3 986	3 429	3 097	1 849	1 952	1 525
Korea, Republic of	609	634	671	1 112	1 921	2 098
Kuwait	—	—	—	32	41	42
Macau	6	5	4	2	4	2
Malaysia	428	458	508	749	737	667
Mauritius	1	1	1	31	39	36
Mexico	55	55	64	62	43	52
Nauru, Republic of	6	8	9	20	19	16
Netherlands	229	233	237	44	60	39
New Caledonia	—	—	—	51	76	87
New Zealand	1 191	1 207	1 247	1 247	1 598	2 134
Norway	83	47	49	10	9	8
Pakistan	86	72	75	30	77	55
Papua New Guinea	125	128	232	188	237	269
Philippines	105	117	108	285	339	372
Poland	13	12	11	9	16	13
Portugal	26	31	37	6	7	6
Russian Federation	6	7	3	36	23	23
Samoa (American)	—	1	2	12	22	30
Saudi Arabia	242	225	226	127	194	168
Singapore	493	571	524	1 312	1 162	891
Solomon Islands	1	—	1	15	35	27
South Africa	73	83	100	193	207	291
Spain	149	181	172	31	30	34
Sri Lanka	22	21	22	38	71	72
Sweden	495	591	502	40	69	65
Switzerland	302	288	241	59	45	66
Thailand	323	322	335	441	513	411
Turkey	23	26	27	51	92	97
United Arab Emirates	14	5	2	64	112	249
United Kingdom	1 364	1 502	1 634	369	373	416
United States	5 256	5 839	5 945	785	788	956
Vietnam	36	56	90	42	55	61
Western Samoa	24	54	58	6	15	18
Other and unknown	206	165	307	281	324	407
Total	23 967	24 663	25 190	13 008	15 410	16 288

Source: *Foreign Trade statistics, unpublished data*.

10.5 OVERSEAS IMPORTS AND EXPORTS, COMMODITY GROUPS, VICTORIA

Description	Imports			Exports		
	1994-95 \$m	1995-96 \$m	1996-97 \$m	1994-95 \$m	1995-96 \$m	1996-97 \$m
Live animals chiefly for food	47	39	41	58	57	68
Meat and meat preparations	16	19	23	650	656	554
Dairy products and birds' eggs	76	91	90	1 146	1 364	1 427
Fish, crustaceans, and molluscs	176	179	167	137	150	121
Cereals and cereal preparations	64	64	61	233	528	589
Vegetables and fruit	195	219	217	288	354	482
Sugar, sugary preparations, and honey	43	45	43	14	22	19
Coffee, tea, cocoa, spices, and manufactures thereof	213	232	242	117	136	139
Feeding stuff for animals (excluding unmilled cereals)	32	24	36	125	143	170
Miscellaneous edible products and preparations	109	88	81	55	77	98
Beverages	83	84	82	65	88	95
Tobacco and tobacco manufactures	98	80	22	11	11	28
Hides, skins, and fur skins (raw)	—	—	1	178	187	194
Oil seeds and oleaginous fruit	40	36	33	15	47	74
Crude rubber (including synthetic and reclaimed)	105	110	87	11	9	8
Cork and wood	160	121	121	91	113	119
Pulp and waste paper	64	86	55	9	4	3
Textile fibres and their wastes	123	119	102	1 287	1 085	1 193
Crude fertilisers and crude minerals (excluding coal, petroleum, and precious stones)	45	39	44	15	23	20
Metalliferous ores and metal scrap	9	14	10	61	60	55
Crude animal and vegetable materials, n.e.s.	67	71	83	76	65	67
Coal, coke, and briquettes	1	1	1	13	14	15
Petroleum, petroleum products, and related materials	502	659	1 023	366	592	757
Gas, natural and manufactured	—	—	—	62	62	114
Animal oils and fats	1	1	3	53	56	49
Fixed vegetable oils and fats	70	83	82	2	2	4
Animal and vegetable oils and fats, processed and waxes of animal or vegetable origin	4	8	9	30	26	30
Organic chemicals	502	544	578	32	32	25
Inorganic chemicals	106	118	126	30	35	26
Dyeing, tanning, and colouring materials	202	207	222	57	82	86
Medicinal and pharmaceutical products	307	362	398	244	292	307
Essential oils and perfume materials; toilet, polishing, and cleansing preparations	120	121	134	43	53	54
Fertilisers manufactured	161	188	189	1	3	3
Explosives and pyrotechnic products	275	304	276	151	172	168
Artificial resins and plastic materials, cellulose esters and ethers	251	278	250	59	61	56
Chemical materials and products, n.e.s.	269	295	309	136	138	150
Leather, leather manufactures, n.e.s., and dressed fur skins	79	70	66	182	180	197
Rubber manufactures, n.e.s.	315	313	295	86	84	104
Cork and wood manufactures (excluding furniture)	82	86	88	6	8	13
Paper, paperboard, and articles of paper pulp, of paper, or of paperboard	618	665	606	85	100	159
Textile yarn, fabrics, made-up articles, n.e.s., and related products	1 231	1 131	1 066	211	258	290
Non-metallic mineral manufactures n.e.s.	305	294	301	75	82	78
Iron and steel	407	386	394	387	412	374
Non-ferrous metals	179	191	217	1 015	1 022	887
Manufactures of metal n.e.s.	692	698	673	182	204	214
Power generating machinery and equipment	745	751	709	420	419	472
Machinery specialised for particular industries	1 263	1 339	1 175	156	176	183
Metalworking machinery	205	216	244	53	53	63

For footnotes see end of table.

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10.5 OVERSEAS IMPORTS AND EXPORTS, COMMODITY GROUPS, VICTORIA — *continued*

Description	Imports			Exports		
	1994–95 \$m	1995–96 \$m	1996–97 \$m	1994–95 \$m	1995–96 \$m	1996–97 \$m
General industrial machinery and equipment, n.e.s. and machine parts n.e.s.	1 710	1 717	1 711	273	315	340
Office machines and automatic data processing equipment	650	685	705	74	419	308
Telecommunications and sound recording and reproducing apparatus and equipment	1 116	1 146	1 052	119	174	175
Electrical machinery, apparatus, and appliances n.e.s., and electrical parts thereof	1 575	1 633	1 572	332	337	369
Road vehicles (including air cushion vehicles)	2 768	2 628	2 924	422	568	816
Other transport equipment	403	751	865	229	250	666
Sanitary, plumbing, heating, and lighting fixtures and fittings n.e.s.	80	84	90	11	20	20
Furniture and parts thereof	135	145	167	16	29	27
Travel goods, handbags, and similar containers	98	102	101	3	2	3
Articles of apparel and clothing accessories	796	834	885	108	112	135
Footwear	325	342	368	22	26	26
Professional, scientific and controlling instruments, and apparatus n.e.s.	691	699	678	156	179	233
Photographic apparatus, equipment and supplies and optical goods n.e.s.; watches and clocks	538	566	601	305	359	307
Miscellaneous manufactured articles n.e.s.	1 441	1 395	1 460	211	225	242
Commodities and transactions of merchandise trade n.e.c. (a)	979	867	933	1 949	2 597	2 216
Total	23 967	24 663	25 190	13 008	15 410	16 288

(a) Includes gold, non-monetary (excl. gold ore and concentrates).

Source: *Foreign Trade statistics, unpublished data*.

REFERENCES

Data sources

The foreign trade statistics presented in this chapter are compiled in broad agreement with the United Nations' recommendations for the compilation of international trade statistics. Overseas trade statistics are compiled by the ABS from documentation submitted by exporters and importers, or their agents, to the Australian Customs Service, as required by the Customs Act.

ABS sources

International Merchandise Trade, Australia (Cat. no. 5422.0)

Foreign Trade statistics, unpublished data

Chapter 11

Tourism and Culture

Photo:

Puffing Billy

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OVERVIEW

Victoria is one of Australia's most naturally diverse States with a variety of natural features, cultural activities and historic sites.

As a tourist attraction, for both international and domestic visitors, Victoria continues to make an important contribution to the growth of tourism within Australia. Melbourne attracts most of the international and domestic tourists but the Victorian regions are also experiencing growth. The emergence and sustained tourism growth surrounding Hallmark events (these include major sporting and cultural events) within the State has added to the promotion of Victoria to a national and international audience and has attributed to the development of major infrastructure.

Melbourne is viewed by a domestic and international audience as a culturally diverse, vibrant and green city where there are many varied activities for visitors. Lifestyle features prominently in Melbourne promotions, with shopping, dining cafe culture and sport topping the list of things Melburnians do. Cultural activities such as performing arts, film, literature, sports and recreation, language and religious practice and activities based around conservation and enjoying the natural environment provide a basis for community expression and all share an inter-relationship with tourism.

This chapter includes information relating to Victoria's tourism and cultural activities, featuring the arts and recreation.

Tourism and the economy

Tourism is one of Australia's largest income earning industries. In 1996-97 international tourism to Australia generated overseas earnings of \$15.5 billion (up 5.1% on 1995-96). This accounted for 13.3% of Australia's total overseas earnings and 63.7% of services overseas. In 1995-96 tourism directly accounted for 7.4% of expenditure on national Gross Domestic Product and also directly accounted for 7.4% of Victoria's Gross State Product. In the same year tourism was directly responsible for the employment of 169,000 persons which represented 8.2% of Victorian employment. Victoria's share of direct tourism employment nationally (694,000) in 1995-96 was 24%.



Photo

Phillip Island Penguins

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International tourism

The number of short term overseas visitors to Australia, who specified Victoria as their main destination, increased from 438,742 in 1994 to 543,094 in 1996. Victoria's share of overseas arrivals to Australia, however, decreased from 13.1% in 1994 to 12.9% in 1995 before increasing marginally to 13.0% in 1996.

11.1 INTERNATIONAL VISITORS(a) TO AUSTRALIA BY MAIN STATE OR TERRITORY OF INTENDED STAY

	1994 no.	1995 no.	1996 no.	1996 % of Australia
New South Wales	1 468 041	1 612 407	1 775 632	42.6
Victoria	438 742	480 205	543 094	13.0
Queensland	970 631	1 110 459	1 279 706	30.7
South Australia	69 911	74 289	83 414	2.0
Western Australia	329 165	344 535	382 870	9.2
Tasmania	17 992	21 878	18 501	0.4
Northern Territory	42 240	45 164	46 591	1.1
Australian Capital Territory	25 000	28 464	30 136	0.7
Australia(b)	3 361 721	3 725 825	4 164 826	100.0

(a) Short-term arrivals who stayed less than 12 months in Australia. (b) Includes 'not stated'.

Source: *Overseas Arrivals and Departures, Australia* (Cat. no. 3401.0): ABS unpublished data.

In 1996, the major source of international visitors to Australia who specified their main State of intended stay as Victoria was New Zealand with 19.3% of the State visitor total. This was followed by the United Kingdom and Ireland with 10.7%, the USA with 9.9% and Japan 8.5%.

11.2 VICTORIA AS MAIN STATE OF INTENDED STAY BY INTERNATIONAL VISITORS(a) BY COUNTRY OF RESIDENCE

Country of residence	1994	1995	1996	Percentage 1996 %	Percentage change 1994 to 1996 %
New Zealand	69 672	86 089	105 057	19.3	50.8
UK and Ireland	55 554	55 470	58 199	10.7	4.8
Germany, Fed Rep	19 963	18 324	18 113	3.3	-9.3
Indonesia	16 529	20 078	26 902	5.0	62.8
Malaysia	18 194	19 466	22 951	4.2	26.1
Singapore	21 670	23 974	28 474	5.2	31.4
Thailand	16 832	14 780	16 980	3.1	0.9
Hong Kong	22 349	19 650	22 504	4.1	0.7
Japan	38 958	38 769	46 039	8.5	18.2
Taiwan	17 824	18 044	16 201	3.0	-9.1
USA	45 138	51 449	53 934	9.9	19.5
Other countries	96 059	114 022	127 740	23.5	13.2
All countries	438 742	480 205	543 094	100.0	23.8

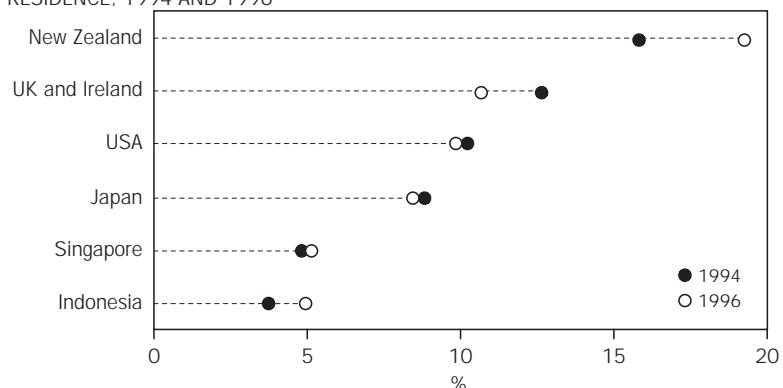
(a) Short-term arrivals who stayed less than 12 months in Australia.

Source: *Overseas Arrivals and Departures, Australia* (Cat. no. 3401.0): ABS unpublished data.

From 1994 to 1996, the most significant percentage growth in visitors to Victoria came from Indonesia with a 62.8% increase, followed by New Zealand and Singapore with increases of 50.8% and 31.4% respectively. For Victoria the growth in visitor arrivals over this period was 23.8%, compared with 23.9% for Australia.

Holidaying was the most common reason for overseas visitors arriving in Australia with Victoria as the main destination. The proportion of visitors nominating 'holiday' increased slightly to 41.2% in 1996 from 40.9% in 1995 but this was still much lower than the 46% recorded in 1994. The proportion of visitors who nominated 'visiting friends/relatives' and 'business' accounted for 28.7% and 15.4 % respectively for 1996.

PROPORTION OF INTERNATIONAL VISITORS TO VICTORIA(a) BY COUNTRY OF RESIDENCE, 1994 AND 1996



(a) Main State of intended stay.

Source: *Overseas Arrivals and Departures, Australia, Unpublished data*.

11.3 VICTORIA AS MAIN STATE OF INTENDED STAY BY INTERNATIONAL VISITORS(a) BY REASON FOR JOURNEY

Reason for journey	1994	1995	1996
NUMBER			
Holiday	201 638	196 210	223 503
Visiting friends	120 050	142 435	156 012
Business	66 291	74 776	83 516
Other	50 763	66 784	80 063
Total	438 742	480 205	543 094
%			
Holiday	46.0	40.9	41.2
Visiting friends	27.4	29.7	28.7
Business	15.1	15.6	15.4
Other	11.6	13.9	14.7
Total	100.0	100.0	100.0

(a) Short-term arrivals who stayed less than 12 months in Australia.

Source: *Overseas Arrivals and Departures, Australia (Cat. no. 3401.0)*: ABS unpublished data.

Tourist attractions

During 1996, 90% of all overseas tourists to Victoria visited Melbourne. The most popular attractions were Melbourne for shopping and the Queen Victoria Market (71% and 42% respectively).

Photo:

Sovereign Hill

Delete keylines

11.4 VISITORS TO VICTORIA, BY ATTRACTIONS VISITED

Places visited	1994 %	1995 %	1996 %
Melbourne	92.0	92.0	90.0
Melbourne shopping	72.0	73.0	71.0
Royal Botanic Gardens	23.0	25.0	27.0
Queen Victoria Market	40.0	42.0	45.0
Phillip Island	31.0	29.0	27.0
Captain Cook's Cottage/Fitzroy Gardens	25.0	24.0	23.0
Victorian Arts Centre	14.0	13.0	13.0
National Gallery of Victoria	12.0	14.0	15.0
Melbourne Zoo	15.0	15.0	13.0
Museum of Victoria	15.0	14.0	15.0
Melbourne Festival/Crafts	8.0	9.0	11.0
Sovereign Hill at Ballarat	13.0	10.0	11.0
Healesville Sanctuary	9.0	9.0	7.0
Southgate	16.0	20.0	21.0
The Twelve Apostles	16.0	14.0	17.0
Rialto Observation Deck	n.a.	15.0	18.0
Crown Casino	n.a.	15.0	16.0
Wineries	7.0	7.0	9.0
Melbourne Cricket Ground	n.a.	9.0	8.0
Scienceworks	1.0	2.0	2.0
Total visitors ('000)	854.8	922.6	—

(a) Percentages may add to more than 100% as visitors may have visited more than one attraction.

Source: Bureau of Tourism Research, *International Visitor Survey*.

Visitor expenditure

Average expenditure per person on items purchased in Australia or pre-paid (excluding package tours and pre-paid international airlines) by overseas visitors in 1996 was \$1,934 (ranging from \$1,140 for New Zealanders to \$3,117 for Indonesians). Average expenditure per night ranged from \$48 for visitors from the United Kingdom and Ireland to \$131 for visitors from Japan. (Source—BTR IVS, 1996.)

Melbourne

Melbourne hosted a number of major events which appealed to both domestic and overseas visitors. The following is based on information prepared by Tourism Victoria.

Melbourne's ability to handle events is supported by a range of venues accommodating up to 100,000 visitors with over 18,000 rooms within a five kilometre radius of the city. Melbourne also has a fully integrated domestic and international airport and a comprehensive transport system.

The Melbourne International Festival of the Arts is held over sixteen days in October. It is a festival of opera, theatre, film, dance, music, and visual arts. Melbourne comes alive as a range of innovative and artistically rewarding performances from around the world are showcased in venues throughout the city.

The Melbourne International Flower and Garden Show is Australia's largest Ornamental Horticulture presentation. It is held annually within the Carlton Gardens and the historic Exhibition Building. Highlights of the 1997 event included the Great Hall of Flowers, the Garden Sculpture Gallery, the Florist Windows of the World, and international landscape displays from Boston and Tianjin. Over 300 exhibits made up the largest show of its kind in the southern hemisphere.

The annual Melbourne International Comedy Festival, along with Montreal and Edinburgh, is one of the largest comedy festivals in the world. The festival showcases a diversity of local, national and international talent.

The Australian Grand Prix, opening round of the FIA Formula One World Championships, is Australia's premier motor sport event. An annual event, the Grand Prix was hosted for the first time by Melbourne in March 1996 at the redeveloped Albert Park circuit. Media coverage ensures extensive world wide coverage to over 120 countries reaching up to 500 million viewers.

The Australian Open, held at Melbourne Park for two weeks each January, attracts many tennis enthusiasts both from within Australia and overseas. It is a Grand Slam partner to the French Open, Wimbledon and the US Open. The 1997 Australian Open recorded a total of 391,504 attendances. 11.8% of these attendances came from overseas and 15.3% from interstate. The contribution to the Victorian economy was estimated at \$82.6 million.

The Spring Racing Carnival, held in Victoria during October and November each year, is recognised as a premier horse racing event that includes some of the most important races in the international racing calendar. The main event of the Carnival is the running of the Melbourne Cup on the first Tuesday in November. The Carnival also includes events covering the arts, culture, fashion, entertainment and sports.

In 1997 Victoria hosted the 500cc Motorcycle Grand Prix at Phillip Island for the first time since 1991 when the race was transferred to New South Wales. The Victorian Government has signed a five year contract to host the event from 1997 which is estimated to generate over \$60 million a year for Victoria.

The Australian International Airshow and Aerospace Expo held every second year at Avalon Airport is the biggest aviation and aero space event in the Southern Hemisphere. The event combines a trade show held over four days and an air show on the last two days. The 1997 Airshow recorded 171,168 attendances and an estimated contribution to the Victorian economy of \$63 million.

The Melbourne Moomba Festival is an annual event which focuses on the Yarra River, the adjacent Alexandra Gardens and the City centre. It is one of Australia's largest outdoor free festivals which is popular with persons of all ages. In 1996 the festival attracted 1,320,000 people, of whom 2% were from overseas and 4% from interstate.

The Australian Football League Grand Final is held at the Melbourne Cricket Ground (MCG) each year on the last Saturday in September and attracts more than 90,000 fans to the MCG. Television coverage extends to overseas countries.

The Melbourne Boxing Day Test Match is held at the historic Melbourne Cricket Ground and is one of the great traditions of sport in Victoria and Australia.

During 1995 there were 593,180 short term departures of Victorian residents, an increase of 9.4% over 1994. The five main destinations for Victorian travellers were the USA (13.3%), New Zealand (12.6%), UK and Ireland (10.7%), Indonesia (7.8%) and Hong Kong (6.1%).

11.5 SHORT-TERM DEPARTURES BY VICTORIAN RESIDENTS(a)

Country of stay	1994 no.	1995 no.	1996 no.	1996 %
USA	71 240	79 164	81 578	12.7
New Zealand	72 164	74 451	86 568	13.5
UK and Ireland	57 153	63 491	67 117	10.5
Indonesia	40 105	46 369	53 526	8.3
Hong Kong	27 355	35 934	37 163	5.8
Fiji	21 001	15 759	15 695	2.4
Malaysia	21 239	23 470	25 978	4.0
Thailand	16 832	17 320	19 476	3.0
Viet Nam	11 875	14 364	15 617	2.4
Singapore	17 365	19 547	20 706	3.2
Greece	12 379	15 070	12 765	1.9
Italy	14 735	15 492	20 347	3.2
China	7 622	15 300	16 013	2.5
Other	150 977	157 449	168 807	26.3
Total	542 042	593 180	641 646	100.0

(a) Short-term departures who intended to stay overseas less than 12 months.

Source: ABS *unpublished data*.

Domestic tourism

During 1995–96 interstate and intrastate visitors accounted for 76% of total visitor nights compared with 24% of visitor nights for international tourists. Domestic tourism is defined as 'travel by Australian residents involving a stay away from home for one or more nights and requiring a journey of at least 40 kilometres from home, undertaken for any reason'. (See references for note on data comparability at the end of this chapter.)

11.6 INTERNATIONAL AND DOMESTIC TOURISM: A COMPARISON OF VISITOR NIGHTS(a), 1995–96

Source of visitor	Victoria		Australia	
	'000	% of total	'000	% of total
International	(b)15 326	24.0	90 152	26.0
Domestic–	48 430	76.0	(c)256 472	74.0
Interstate	15 453	31.9	100 506	39.2
Intrastate	32 977	68.1	153 208	59.7
Total	63 756	100.0	346 624	100.0

(a) The international figures relate to visitors 15 years and over and domestic figures relate to the Australian population aged 14 years and over. (b) Derived estimate based on Bureau of Tourism Research data. (c) Includes figures for NT and ACT which are not separately recorded for Interstate and Intrastate visitors. Also includes total nights where destination was not stated.

Source: Bureau of Tourism Research, Canberra; *Domestic Tourism Monitor 1995–96*; and *International Visitor Survey, 1996*.

Total domestic visitor nights spent in Victoria by Australian residents increased from 47,270 in 1994–95 to 48,430 in 1995–96, a rise of 2.5%. In terms of visitor nights, Victorian tourism accounted for 18.9% of the total Australian market compared with 31.2% for New South Wales and 24.8% for Queensland. The major part of domestic tourism (68.1%) in Victoria was accounted for by intrastate visitor nights. This compared with 59.7% for Australia.

During 1995–96, the most common reasons for domestic travel in Victoria were 'pleasure and holiday' and 'visiting friends and relatives' which accounted for 41.6% and 30.3% respectively of all visitor nights. For interstate travellers the main purpose of visiting Victoria was 'visiting friends and relatives' (37.7% of visitor nights).

11.7 DOMESTIC VISITOR NIGHTS, BY PRIMARY PURPOSE OF TRIP, VICTORIA 1995-96

	Pleasure/ holiday '000	Visiting friends/ relatives '000	Business '000	Total(a) '000
Interstate	4 823	5 825	2 502	15 453
Intrastate	15 323	8 832	3 081	32 977
Total nights	20 146	14 657	5 583	48 430

(a) Includes 'not stated' and 'other purposes', not separately recorded.

Source: Bureau of Tourism Research, *Domestic Tourism Monitor, 1995-96*.

Profile of travel to Victorian regions

During 1995 there were 15 million overnight visitors (international, interstate and intrastate) to Victoria. Of these, over 5 million travelled to the Melbourne region, 2.2 million visited the Great Ocean Road region and 1.7 million travelled to the Goldfields region. Overnight trip expenditure in Victoria totalled \$3.4 billion during 1995. A large proportion of this (61.6%) was spent in the Melbourne region. (See references for note on data comparability at the end of this chapter.)

11.8 TOURISM IN VICTORIAN REGIONS, 1995

Victorian regions(a)	Visitors '000	Origin of visitor				Expenditure \$m
		Intrastate %	Interstate %	International %	Total %	
Melbourne (1, 2)	5 170	43.0	41.0	17.0	100.0	2 122
Oasis (10, 11)	919	67.0	31.0	2.0	100.0	138
Great Ocean Road (7, 8)	2 211	87.0	12.0	2.0	100.0	242
Grampians (9)	575	75.0	24.0	1.0	100.0	79
Goldfields (6, 12, 13)	1 672	80.0	17.0	3.0	100.0	186
Goulburn, Central Murray (14)	1 282	86.0	13.0	1.0	100.0	141
Legends, Wine & High Country (5, 15, 16)	1 456	88.0	12.0	1.0	100.0	219
Lakes (17)	894	88.0	10.0	2.0	100.0	134
Gippsland (18)	937	93.0	6.0	2.0	100.0	69
Mornington Peninsula & Phillip Island (3, 4, 7)	1 236	91.0	9.0	1.0	100.0	119
Total Victoria(b)	14 956	74.0	20.0	6.0	100.0	3 447

(a) The numbers shown in brackets adjacent to each region refer to the 18 sub-regions listed on the map overleaf. (b) Regional figures do not add to Victorian total because visitors are counted to each region visited.

Source: Tourism Victoria, *Victorian Regional Travel and Tourism Survey*.

TOURISM IN VICTORIAN REGIONS

Sub Regions

1 Melbourne A	10 Wimmera
2 Melbourne B	11 Murray Mallee
3 Mornington Peninsula	12 Bendigo Loddon
4 Phillip Island	13 Bendigo & Surrounds
5 Yarra Valley	14 Goulburn/Central Murray
6 Spa Country	15 Murray/North East
7 Geelong/East Barwon	16 Snowfields
8 Western	17 Lakes
9 Grampians	18 Gippsland

(VICTORIAN TOURIST REGIONS MAP, REDUCED TO 90%
TO BE SCANNED AND PLACED BY PRINTER
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Tourist accommodation

At 30 June 1997 Victoria accounted for 20.9% of the number of licensed hotels, motels and guest houses in Australia with takings of \$612 million for the 1996-97 financial year. Victoria also accounted for 22.1% of site nights occupied in caravan parks in Australia during 1996-97.

During 1996-97 the growth in demand for hotel, motel and guest house accommodation in Victoria was almost matched by the growth in supply. The 1.2% increase in the number of room nights occupied was only marginally above the 1.1% increase in the number of guest rooms available. As a result the room occupancy rate increased only slightly from 54.8% in 1996 to 55.3% in 1997.

Regional tourist accommodation

Of the 30,325 guest rooms with facilities in Victoria at 30 June 1997, 49.3% were within the Melbourne Statistical Division (MSD). Room occupancy rates in the MSD for each quarter in 1996-97 ranged from 13.5 to 15.0 percentage points above the State average with takings from accommodation accounting for 73.9% of the Victorian total in 1996-97.

11.9 TOURIST ACCOMMODATION, VICTORIA

Particulars	Unit	Year ended 30 June			1997 % of Australia
		1995	1996	1997	
LICENSED HOTELS, MOTELS, AND GUEST HOUSES					
Establishments (qtr ended June)	no.	1 016	1 021	1 012	20.9
Guest Rooms available (qtr ended June)	no.	29 543	30 007	30 325	17.2
Room nights occupied	'000	5 655.4	5 967.2	6 039	16.4
Room occupancy rate	%	52.1	54.8	55.3	..
Takings from accommodation	\$'000	493 276	569 214	612 485	16.9
CARAVAN PARKS					
Establishments (qtr ended June)	no.	598	599	595	22.1
Vans, sites, cabins available (qtr ended June)	no.	66 977	67 641	66 848	23.2
Site nights occupied	'000	10 028.7	10 209.8	10 314.7	22.1
Site occupancy rate	%	40.9	41.3	42.1	..
Takings from accommodation	\$'000	77 373	82 674	87 452	17.4
HOLIDAY FLATS, UNITS AND HOUSES					
Flats, units & houses (qtr ended June)	no.	3 559	3 763	3 688	8.8
Unit nights occupied	'000	564	631	630	7.9
Unit occupancy rate	%	45.1	46.3	45.7	..
Takings from accommodation	\$'000	45 851	54 272	55 621	9.7
VISITOR HOSTELS					
Establishments (qtr ended June)	no.	55	56	53	10.7
Bed spaces available (qtr ended June)	no.	3 026	3 403	3 490	11.0
Bed occupancy rate	%	37.9	37.8	39.5	..
Takings from accommodation	\$'000	5 337	6 485	7 432	10.3

Source: *Tourist Accommodation, Victoria* (Cat. no. 8635.2).

Outside the MSD the Statistical Divisions of Goulburn (2,894) and Ovens-Murray (1,970) had the greatest number of guest rooms with facilities, accounting for 9.5% and 6.5% respectively of Victorian guest rooms available in 1996-97. With the exception of Melbourne the Barwon Statistical Division, which encompasses Geelong and the beach resorts of Point Lonsdale, Apollo Bay, Ocean Grove, Bells Beach, and Lorne, experienced the strongest seasonal peak (61.8%) in its room occupancy rate in the 1997 March quarter, which is the main period for beach resort activities.

11.10 HOTELS, MOTELS, AND GUEST HOUSES WITH FACILITIES: OPERATIONAL DETAILS BY STATISTICAL DIVISION, 1996-97

Statistical Division	Establishments(a) no.	Guest rooms no.	Room occupancy rates (quarterly)				Takings from accom- modation \$'000
			Sept %	Dec no.	March no.	June no.	
Melbourne	240	14 943	65.5	71.0	74.4	67.2	452 344
Barwon	78	1 657	35.8	47.9	61.8	40.9	22 769
Western District	79	1 412	34.9	44.7	54.3	43.3	14 078
Central Highlands	59	1 225	41.8	50.8	51.4	47.6	15 796
Wimmera	50	877	36.8	45.4	46.0	42.1	8 028
Mallee	69	1 598	45.9	48.2	42.4	46.7	15 186
Loddon	58	1 012	43.7	48.8	49.2	45.9	11 792
Goulburn	141	2 894	42.9	37.9	41.5	37.0	31 208
Ovens-Murray	99	1 970	46.1	30.0	34.0	34.4	19 083
East Gippsland	77	1 448	31.7	38.6	45.8	34.9	11 860
Gippsland	62	1 289	27.1	38.7	44.8	34.9	10 343
Victoria	1 012	30 325	52.0	56.0	59.8	53.3	612 485

(a) Number of establishments and guest rooms at 30 June 1996.

Source: *Tourist Accommodation, Victoria* (Cat. no. 8635.2); *Tourist Accommodation, Australia* (Cat. no. 8635.0).

This article has been provided by Tourism Victoria.

**Backpackers
in Victoria
1996**

Backpackers are an important segment in the international tourism market accounting for over 250,000 visitors to Australia each year. Backpackers tend to be young (18 to 30 years), well educated, have a preference for independent travel and a desire to explore new destinations. They like to socialise with other backpackers as well as interacting with locals.

Backpackers prefer to steer away from commercial attractions in favour of more active, adventurous and different experiences. Natural wonders, unspoilt scenery, excitement, friendly people and value for money are all important travel needs for the backpacker. The backpacker tends to budget on accommodation with the aim of extending the holiday experience. The real economic significance of the market stems from the long average stay of backpackers.

Visitation

Almost 250,000 backpackers travelled to Australia during 1996, representing 7% of all international arrivals in the country. 43% of all backpacker visitors to Australia visited Victoria during 1996. Backpacker visitors represent 11% of all international visitors to the State.

In total 107,900 backpackers visited Victoria during 1996. The largest source market was the UK with 25,050 backpackers visiting the State. Other large markets included Germany (13,900), USA (7,520), Japan (5,650) and Canada (4,300).

Backpackers spent 2.9 million nights in Victoria during 1996 representing 16% of all backpacker nights in Australia, up from 13% in 1993.

11.11 NUMBER OF BACKPACKER VISITORS TO VICTORIA AND AUSTRALIA BY COUNTRY OF RESIDENCE, 1996

Country	Victoria			Australia		
	Visitors no.	Nights '000	Average nights per visitor no.	Visitors no.	Nights '000	Average nights per visitor no.
New Zealand	2 870	179	62	16 740	810	48
Japan	5 650	139	25	21 330	1 172	55
Hong Kong	2 280	10	4	2 350	43	18
Singapore	1 370	6	4	3 640	103	28
Malaysia	1 670	18	11	5 270	160	30
Indonesia	830	100	121	3 420	209	61
Taiwan	700	15	21	3 440	92	27
Korea	3 680	17	5	8 580	433	50
USA	7 520	271	36	20 140	1 184	59
Canada	4 300	78	18	9 040	780	86
UK	25 050	989	39	48 700	5 966	122
Germany	13 900	339	24	26 300	1 507	57
Other	38 100	770	20	79 420	5 901	74
Total	107 920	2 931	27	248 370	18 360	74

Source: Tourism Victoria.

Length of Stay

Backpacker visitors stay considerably longer than the average international visitor. During 1996 backpackers stayed for an average 74 nights in Australia, compared to the average stay for total visitors of 24 nights. Backpackers also stayed 27 nights in Victoria on average, compared to the total average of 16 nights.

During 1996 UK backpackers stayed the longest time (on average) in Australia (122 nights) followed by backpackers from Canada (86 nights), Indonesia (61 nights) and USA (59 nights). For Victoria the longest (on

average) staying backpacker visitors in 1996 were from Indonesia (121 nights), New Zealand (62 nights) and United Kingdom (39 nights).

Market Share

During 1996, 43% (107,920 persons) of all backpackers to Australia (248,370) visited Victoria during their stay. From the various countries over half (51%) of UK backpackers stayed in Victoria, as did those from Hong Kong (97%), Germany (53%), Singapore (38%), USA (37%) and Korea (43%).

Expenditure

Backpackers spent an average of \$4,150 per trip in Australia during 1996, compared with the average trip expenditure of all visitors to Australia of \$1,310.

Backpacker visitors to Victoria spent \$1,520 on average during their stay in the State. Direct expenditure by backpackers in Victoria for the year totalled \$165.5 million. UK backpackers spent the most in Victoria during 1996 (\$43.2m) followed by Germany (\$24.2m), USA (\$18.3m) and New Zealand (\$10.2m).

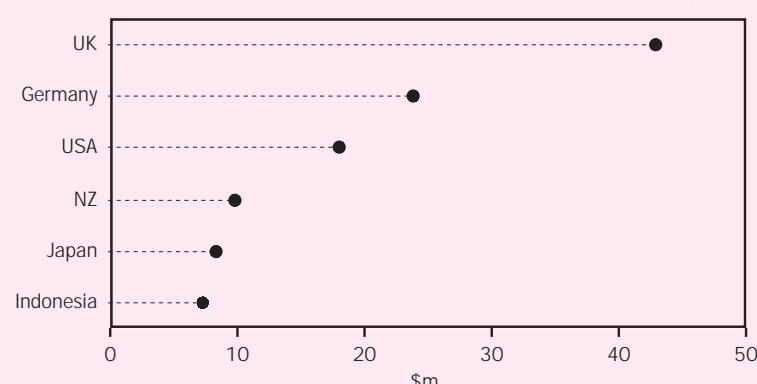
Backpackers spent most money on food, drink, accommodation, shopping and transportation. As backpackers tend to travel more widely, the expenditure is spread more evenly between urban and rural areas.

11.12 BACKPACKER VISITOR EXPENDITURE IN VICTORIA BY COUNTRY OF RESIDENCE, 1996

Country	\$m	%
China	0.45	0.3
Singapore	0.49	1.3
Hong Kong	0.61	0.4
Taiwan	0.83	0.5
Korea	1.10	0.7
Malaysia	1.24	0.7
Canada	3.32	2.0
Indonesia	7.57	4.6
Japan	8.58	5.2
New Zealand	10.18	6.2
USA	18.28	11.0
Germany	24.18	14.6
UK	43.22	26.1
Other	45.45	27.5
Total	165.50	100.0

Source: *Tourism Victoria*.

BACKPACKER VISITOR EXPENDITURE IN VICTORIA BY COUNTRY OF RESIDENCE, 1996



Source: *Tourism Victoria*.

National Estate

The preservation and use of historic sites are important aspects of cultural expression within the community. Many places in Australia have aesthetic, historic, scientific, economic or social significance for the present community and future generations. These include natural environments, historic buildings and sites of significance to Aboriginal people and are collectively known as the 'National Estate'.

The Australian Heritage Commission is the peak advisory body to the Commonwealth Government regarding the identification and conservation of the National Estate. The Commission is responsible for maintaining the Register of the National Estate. The register lists places identified as being of cultural and natural importance which should be conserved for present and future generations.

11.13 REGISTER OF THE NATIONAL ESTATE, 30 JUNE 1997

State/Territory	Aboriginal	Historic	Natural	Total	%
New South Wales	214	2 857	432	3 503	29.1
Victoria	104	2 240	205	2 549	21.2
Queensland	146	721	266	1 133	9.4
Western Australia	74	885	232	1 191	9.9
South Australia	143	851	372	1 366	11.3
Tasmania	65	1 176	232	1 473	12.2
Northern Territory	88	108	51	247	2.1
Australian Capital Territory / Jervis Bay	25	138	28	191	1.6
External territories	—	16	16	32	0.3
Interim list (all States/Territories)	29	132	198	359	3.0
Total	888	9 124	2 032	12 044	100.0

Source: Australian Heritage Commission, *Annual Report*.

Perceptions of what is of heritage value change over time. In the past architecture and buildings were given pre-eminence as cultural icons. Now Australian heritage is increasingly perceived as a record of our past, in all its facets, which assists us as a nation to understand our identity – where we have come from and where our future lies. The register reflects this transition in perception. At 30 June 1997 historic sites (a large percentage of which were buildings) comprised 76% of the registered sites of the National Estate, compared with 7% for Aboriginal sites and 17% for Natural sites. As public awareness changes this balance is likely to change.

Photo

Shamrock Hotel, Bendigo

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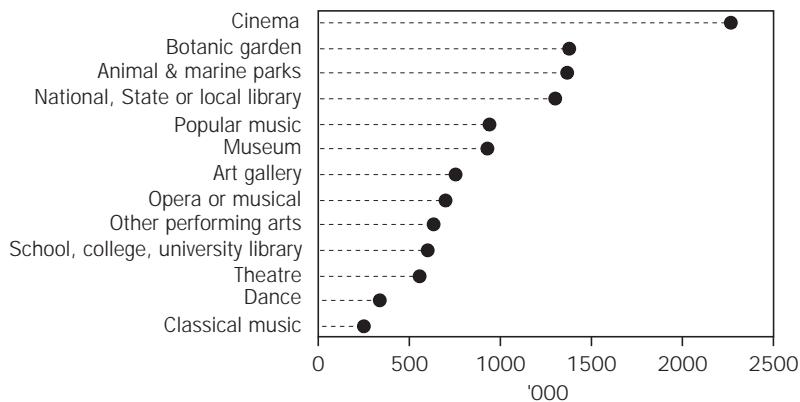
At the 30 June 1997 over 21% of listings on the Register of the National Estate were in Victoria. The majority of these were places of historical significance and included 870 residential buildings, 177 churches or other religious places and 210 places related to farming and grazing. Of the 104 aboriginal sites listed on the register there were 17 aboriginal shell middens, 17 aboriginal art sites and 13 aboriginal burial sites.

Culture and recreation

Over 10% of people's time is spent on social and active leisure activities with a further 13% of time spent in passive leisure during 1994-95.

The attendance of Victorians at selected cultural venues was generally comparable to the Australian average, the major exception being the higher participation rate for attendance at the Melbourne zoo.

PERSONS ATTENDING CULTURAL VENUES, MARCH 1994 – MARCH 1995, VICTORIA



Source: *Attendance at Selected Cultural Venues* (Cat. no. 4114.0).

11.14 PERSONS ATTENDING CULTURAL VENUES, VICTORIA AND AUSTRALIA MARCH 1994 – MARCH 1995

Venue / activity	Victoria		Australia	
	Persons attending '000	Participation rate(a) %	Persons attending '000	Participation rate %
Art gallery	756.4	21.3	3 134.1	22.3
Museum	922.8	26.0	3 905.6	27.8
Animal & marine parks	1 354.1	38.2	4 966.0	35.3
Zoo	996.3	28.1	3 123.9	22.2
Botanic garden	1 362.4	38.5	5 410.5	38.5
National, State, or local library	1 288.7	36.4	5 403.1	38.4
School, college or university library	611.6	17.3	2 402.1	17.1
Popular music	932.4	26.3	3 790.7	26.9
Classical music	261.6	7.4	1 081.3	7.7
Theatre	564.7	15.9	2 336.3	16.6
Dance	351.4	9.9	1 407.5	10.0
Children's dance	94.6	2.7	417.7	3.0
Opera or musical	705.4	19.9	2 722.1	19.3
Opera only	79.2	2.2	327.3	2.3
Musical only	538.9	15.2	2 087.7	14.8
Both opera & musical	87.3	2.5	307.0	2.2
Other performing arts	639.3	18.0	2 634.4	18.7
Circus	275.6	7.8	1 132.8	8.1
Cinema	2 220.2	62.7	8 733.8	62.1

(a) The participation rate is the number of people who attended a venue at least once during the year, expressed as a percentage of the civilian population in the same population group (e.g. age group).

Source: *Attendance at Selected Cultural Venues* (Cat. no. 4114.0).

The participation rate can be used to compare the level of involvement in cultural activities of different population groups. In Victoria the highest participation rate was for cinema attendance at 63%, followed by Botanic Gardens (39%), Animal and marine parks (38%) and Libraries (National, State and local) (36%).

Generally participation rates were highest for those in the 15–44 year age groups, declining with age from 45 years. Two exceptions were attendance at Popular music venues which peaked at a participation rate of 49% for 18–24 year olds and Opera or musical venues which peaked at a participation rate of 26% for 45–54 year olds. Generally persons aged 65 years and over participated at significantly lower rates than people in other age groups.

11.15 PERSONS ATTENDING CULTURAL VENUES BY AGE, VICTORIA, MARCH 1994–MARCH 1995

Venue/activity	Age group (years)						65 and over	Total
	15–17	18–24	25–34	35–44	45–54	55–64		
PERSONS ATTENDING								
Art gallery	47.5	103.0	136.8	156.3	131.6	89.2	92.0	756.4
Museum	54.4	124.1	184.8	228.0	153.9	87.9	89.7	922.8
Animal & marine parks	84.0	223.9	351.6	300.3	181.3	116.3	96.8	1 354.1
Botanic garden	71.3	211.7	292.1	290.9	207.5	133.6	155.3	1 362.4
National, State or local library	96.5	199.8	249.9	288.1	186.5	112.2	155.8	1 288.7
Popular music	55.5	240.6	240.2	187.1	114.1	59.0	35.9	932.4
Classical music	*5.8	27.0	35.3	61.5	53.4	42.2	36.4	261.6
Theatre	38.3	71.5	134.3	117.1	99.8	60.8	42.9	564.7
Dance	20.7	51.9	66.9	81.3	64.8	34.6	31.2	351.4
Opera or musical	32.2	94.6	139.4	139.7	141.3	78.0	90.2	705.4
Other performing arts	37.8	133.9	188.8	141.6	76.8	32.1	28.2	639.3
Cinema	163.0	441.9	523.7	449.9	315.3	156.9	169.6	2 220.2
PARTICIPATION RATES								
Art gallery	26.6	20.8	19.3	23.1	24.0	23.3	16.7	21.3
Museum	30.4	25.0	26.0	33.7	28.1	23.0	16.3	26.0
Animal & marine parks	46.9	45.1	49.5	44.4	33.1	30.4	17.6	38.2
Botanic garden	39.8	42.7	41.1	43.0	37.9	34.9	28.2	38.5
National, State or local library	53.9	40.3	35.2	42.6	34.1	29.3	28.3	36.4
Popular music	31.0	48.5	33.8	27.7	20.8	15.4	6.5	26.3
Classical music	*3.2	5.4	5.0	9.1	9.8	11.0	6.6	7.4
Theatre	21.4	14.4	18.9	17.3	18.2	15.9	7.8	15.9
Dance	11.6	10.5	9.4	12.0	11.8	9.0	5.7	9.9
Opera or musical	18.0	19.1	18.2	20.7	25.8	20.4	16.4	19.9
Other performing arts	21.1	27.0	26.6	20.9	14.0	8.4	5.1	18.0
Cinema	91.1	89.1	73.7	66.5	57.6	41.0	30.8	62.7

Source: Attendance at Selected Cultural Venues (Cat. no. 4114.0).

Employment

In 1996 there were 39,982 persons working in selected cultural occupations in Victoria of which the largest proportion worked as designers and illustrators (7,136 persons or 17.8%) followed by people working as journalists and related professionals (3,490 persons or 8.7%) and private teachers (music, art, drama, dance) (2,760 persons or 6.9%). Close to two thirds (63%) worked full time (35 hours or more per week) in their occupations; 18.8% worked 16–34 hours and 17% less than 16 hours per week.

Of those working in cultural occupations 14% were aged 15 to 24 years.

In terms of income 24.7% of people employed in selected cultural occupations earned less than \$15,599 per year whilst 36.8% earned from \$15,600 to \$31,199

per year and 37% earned more than \$31,200 per year. Occupations with the highest proportion of workers earning more than \$31,200 per year included media producers and artistic directors (67.8%), architects and landscape architects (60.1%) and journalists and related professionals (59.6%). By contrast occupations with the highest proportion of workers earning less than \$15,599 included private music, art, drama and dance teachers (55.5%) and visual arts and crafts professionals (49.0%).

11.16 CHARACTERISTICS OF PERSONS WORKING IN SELECTED CULTURAL OCCUPATIONS, VICTORIA, 1996

Occupation	Youth aged 15-24 years no.	Hours worked per week			Individual annual income				Total employed persons
		Less than 16 hours no.	16-34 hours no.	35 plus hours no.	Less than \$15,599 no.	\$15,600 to \$31,199 no.	\$32,000 and over no.		
Designers & illustrators	1 259	523	926	5 607	1 085	2 885	3 055		7 136
Journalists & related professionals	444	381	477	2 601	361	1 008	2 080		3 490
Private teachers (music, art, drama, dance)	463	1 383	787	554	1 532	901	290		2 760
Architects & landscape architects	118	152	253	2 274	249	795	1 626		2 705
Visual arts & crafts professionals	240	384	571	1 559	1 254	961	297		2 558
Librarians	126	306	566	1 514	323	813	1 249		2 403
Performing arts support workers	425	250	367	1 318	334	892	729		1 950
Library technicians	168	241	620	1 008	463	1 217	179		1 877
Musicians & related professionals	272	702	564	532	653	562	517		1 770
Photographers	197	217	293	1 124	443	669	504		1 653
Library assistants	364	465	413	649	674	763	86		1 539
Architectural associates	221	94	172	1 149	200	560	649		1 423
Film, television, radio & stage directors	103	100	165	903	162	338	666		1 188
Media producers & artistic directors	96	55	97	996	71	277	781		1 152
Actors, dancers & related professionals	296	403	274	316	395	377	228		1 024
Arts / related professionals	73	115	203	589	283	317	301		923
Ticket collector or usher	442	520	151	116	604	153	31		796
Other cultural	463	516	655	2 359	779	1 241	1 524		3 635
Total cultural	5 770	6 807	7 554	25 168	9 865	14 729	14 792		39 982

Source: *Census of Population and Housing, unpublished data*.

Cultural funding

Governments in Australia provide considerable financial support to organisations in the culture industry across a diverse range of arts and cultural activities. Government funding in Australia was \$3,052 million in 1994-95 and 3,195 million in 1995-96. In 1995-96 \$1,372 million (42.9%) was contributed by the Commonwealth government, \$1,217.6 million (38.1%) by State/Territory Governments and \$605.2 million (18.9%) from Local Governments. Total cultural funding in Australia in 1995-96 represented \$176 per head of mean population.

Of the \$1,217.6 million cultural funding by States and Territories in 1995-96, Victoria accounted for \$225.1 million (18.5%) compared with \$382.2 million (31.4%) for NSW and \$230.1 million (18.9%) for Queensland. In Victoria \$136.8 million (60.8%) of State Government cultural funding in 1995-96 was for 'cultural facilities and services', \$69.3 million (30.8%) for 'recreational facilities

and services,' \$13.2 million (5.9%) for 'other recreation and culture' and \$5.8 million (2.6%) for 'broadcasting and film'.

11.17 CULTURAL FUNDING BY VICTORIAN STATE GOVERNMENT, 1995-96

Particulars	\$m
Recreational facilities & services	69.3
National parks & wildlife services	69.3
Cultural facilities & services	136.8
Zoological & botanic gardens	9.4
Libraries & archives	55.4
Literature & publishing	0.5
Museums	25.6
Art galleries	10.0
Visual arts/crafts & photography	1.4
Performing arts venues & arts centres	17.3
Music (excluding opera)	1.9
Other performing arts	6.8
Cultural heritage	8.5
Broadcasting & film	5.8
Film & video	5.8
Other recreation & culture	13.2
Administration of culture	6.5
Community cultural services	1.4
Other culture	5.3
Total	225.1

Source: *Census of Population and Housing, 1996*

Total cultural funding by local government in Victoria in 1995-96 was \$167.7 million. The largest category of cultural funding for Victorian Local Government was libraries and archives which accounted for 43% of total funding. The next most significant category was public halls and civic centres accounting for 36.3% of total funding.

11.18 CULTURAL FUNDING BY LOCAL GOVERNMENT, VICTORIA, 1995-96

Category	\$m	%
Recreational facilities & services	61.7	36.8
Public halls & civic centres	60.8	36.3
Cultural facilities & services	96.0	57.2
Libraries & archives	72.1	43.0
Other	23.9	14.3
Other recreation & culture(a)	10.0	6.0
Total	167.7	100.0

(a) Includes broadcasting and film.

Source: *Cultural Funding, Australia* (Cat. no. 4183.0) unpublished data.

Sports involvement

In 1993, 32% of persons aged 15 and over had either paid or unpaid involvement with sport (40% of males and 25% of females). Victoria had slightly higher participation than New South Wales (31.5%) and Queensland (31.4%), but lower than all other States and Territories.

11.19 PERSONS WITH PAID AND UNPAID INVOLVEMENT IN SPORT(a), VICTORIA, 1997

	Paid involvement \$'000	Unpaid involvement only \$'000	Paid & unpaid involvement \$'000	All sport involvement \$'000	No involvement \$'000	Total \$'000	Participation rate %
Males	27.0	662.8	22.5	712.2	1 060.6	1 772.9	40.2
Females	16.2	425.5	17.3	459.0	1 392.2	1 851.1	24.8
Persons	43.1	1 088.3	39.8	1 171.2	2 452.8	3 624.0	32.3

(a) 12 months ended March 1997.

Source: *Involvement in Sport, March 1997* (Cat. no. 6285.0).

Sports industries

In 1994–95 the three sports industries, 'horse and dog racing,' 'sports grounds and facilities' and 'sports and services to sports', made important contributions to the Victorian economy. The industries provided employment for 17,713 persons and generated gross income of \$798.4m. In terms of number of businesses, employment and gross income, Victoria contributed the largest proportion of all States, with 27%, 30% and 32% respectively. By way of comparison Victoria contributed 25% to the Australian estimated resident population.

11.20 SPORTS INDUSTRIES, VICTORIA, 1994–95

Sports industry	Businesses		Employment		Wages and salaries		Gross income	
	no.	%	no.	%	\$m	%	\$m	%
Horse & dog racing	249	18.0	3 983	22.5	42.5	25.2	242.3	30.3
Sports grounds & facilities	430	31.1	6 802	38.4	55.3	32.8	242.9	30.4
Sports & services to sports	703	50.9	6 928	39.1	71.1	42.1	313.3	39.2
Total	1 382	100.0	17 713	100.0	168.8	100.0	798.4	100.0
Victoria as percentage of Australia		27.3		30.3		28.0		31.7

Source: *Sports Industries Australia 1994–95* (Cat. no. 8686.0).

During the twelve months ended June 1996, 31% of Victorians aged 15 years and over participated in organised sport and physical activities (1,080,800 people). Males had a higher participation rate (35%) than females (28%) in Victoria which was similar across Australia with 34% and 27% respectively. Each participant spent an average of \$645 during 1995-96 on sport and physical activities.

11.21 PARTICIPATION IN SPORT, VICTORIA AND AUSTRALIA, 1996

	Persons participating		Participation rate	
	'000	'000	%	%
Males	593.8	2 314.2	34.7	34.0
Females	487.0	1 910.0	27.6	27.4
Total	1 080.8	4 224.2	31.1	30.7

Source: *Participation in Sport and Physical Activities, Australia* (Cat. no. 4177.0).

Recreational fishing

During 1996, 841,000 Victorians, or 23.3% of the State's population aged fourteen years of age and over, fished at least once. Of these persons: 70% were male, 63% were residents of Melbourne, 54% were aged 25–49 years and 65% were in full-time or part-time employment. In terms of frequency 460,000 Victorians, or 10.6% of the State's population, fished at least once each quarter during 1996. (Source: A Report on the Tracking Survey on Fishing in Victoria 1996—general Report, Natural resources and Environment.)

Photo:

Squeaky Beach (The Prom.) with fisherman

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Books

Reading and literature are popular recreational and cultural pursuits in Australia. Book publishing organisations within Australia provide an important service to the reading public. In 1995–96 the 214 businesses predominantly engaged in book publishing in Australia sold \$561.1 million of Australian titles out of total book sales of \$950 million. These organisation earned \$80.3 million through export of books, sold 130.6 million books and published 6,841 new Australian titles. There were 49.2 million books imported by the publishing businesses and these sold for \$384 million.

At the end of June 1996 there were 66 publishing businesses with their head office in Victoria that accounted for \$343.2 (36.1%) of the total book sales (\$950 million) generated by all book publishing organisations in Australia.

Music

At the 30 June 1996 there were 541 businesses in Australia which were active in the field of music. The businesses comprised record companies, distributors, manufacturers of recorded music, music publishers and sound recording studios. The businesses employed 3,886 persons, of which 2,324 (60%) were employed by record companies and distributors and 800 (21%) by sound recording studios.

During the same period 26% of Australian 'record companies and distributors' were based in Victoria which accounted for 17% of total employment in the industry in Australia. The comparable figures for sound recording studios were 28% and 23%.

REFERENCES

Data sources

The tourism statistics contained in this chapter are based on information from the Australian Bureau of Statistics, the Bureau of Tourism Research and Tourism Victoria. Care should be taken in comparing data from these sources because of differing survey methodologies, such as differences in population age groups, for example, BTR international visitor data relates to people aged 15 years and over; BTR domestic tourism relates to the population aged 14 years and over; and Tourism Victoria's 'Victorian Regional Travel and Tourism Survey' relates

to visitors of all age groups and includes both domestic and international tourists.

The Bureau of Tourism Research International Visitor Survey (IVS) is the major source of information on the travel patterns of international visitors to Australia. It provides a profile of the characteristics, travel behaviour and expenditure of international visitors. The IVS was first conducted in 1969 and then intermittently throughout the 1970s. A survey has been conducted annually since 1981, with the exceptions of 1982 and 1987.

The Bureau of Tourism Research Domestic Tourism Monitor (DTM) has been conducted since 1978–79. The DTM is designed to provide estimates of the volume of domestic travel within each State and Territory, and information about the characteristics and behaviour of domestic travellers to enable monitoring of changes in these features over time.

The Victorian Regional Travel and Tourism Survey conducted by Tourism Victoria presents an overall picture of regional tourism throughout the State. Information is collected on overnight and day trips taken within Victoria including intrastate, interstate and international visitors. Survey information includes: visitors, length of stay, purpose of trip, first/previous visit, accommodation, activities, visitor nights, origin of visitor, demographics, transport used, satisfaction levels and expenditure.

ABS sources

1996 Census of Population and Housing

Overseas Arrivals and Departures, Australia (Cat. no. 3401.0)

Tourist Accommodation, Victoria (Cat. no. 8635.2)

Tourist Accommodation, Australia (Cat. no. 8635.0)

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Cultural Funding, Australia (Cat. no. 4183.0), *Unpublished data*

Attendance at Selected Cultural Venues (Cat. no. 4114.0)

Employment in Selected Culture/Leisure Occupations, Australia, August 1996 (Cat. no. 6273.0)

Involvement in Sport, March 1997 (Cat. no. 6285.0)

Participation in Sport and Physical Activities Australia (Cat. no. 4177.0)

Sports Industries Australia 1994–95 (Cat. no. 8686.0)

Cultural Trends in Australia (Cat. no. 1363.0), *Unpublished data*

A Report on the Tracking Survey on Fishing in Victoria 1996—General Report, Natural Resources and Environment.

Non-ABS sources

Australian Heritage Commission, 'Annual Report'

Bureau of Tourism Research, Domestic Tourism Monitor (BTR DTM)

Bureau of Tourism Research, International Visitors Survey (BTR IVS)

Tourism Victoria, Victorian Regional Travel and Tourism Survey

Chapter 12

Finance

Photo:

ANZ Bank building

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OVERVIEW

This chapter provides an overview of the public and private finance sectors in Victoria. Areas analysed include government finance statistics, State and local government finance, Commonwealth and State financial relations, the Australian financial system, banks, and non-bank financial institutions.

PUBLIC FINANCE

The public finance statistics in this chapter measure activity of the State and Local government components of the Victorian public sector, classified according to the government finance statistics framework. A series of summary tables show, on a consolidated basis, revenue, outlays and financing transactions, financial assets and liabilities and the purposes that are being served by government expenditure programs.

The Victorian Government and local government enterprises include the central government of Victoria, statutory bodies created by or under State legislation to carry out activities on behalf of the central government, incorporated organisations in which the central government has a controlling interest, and local government authorities.

Government finance statistics

The system of government finance statistics is designed to provide statistics about all public sector authorities, such as government departments, statutory authorities, and local government authorities, with the exception of those regarded as financial institutions (e.g. government banks and insurance offices). The system is based on international standards set out in the International Monetary Fund's *A Manual of Government Finance Statistics* and the United Nations' *A System of National Accounts*. The statistics in this chapter cover public trading enterprises and general government bodies owned or controlled by the State and local governments.

Public trading enterprises are undertakings which aim to recover a substantial proportion of their expenses by revenue from the sale of goods and services. General government bodies are all the agencies of government not classified as either public trading or financial enterprises i.e. all government departments, offices and other bodies engaged in providing services free of charge or at prices significantly below their cost of production. Central borrowing authorities of State Governments (e.g. Treasury Corporation of Victoria) are also classified as general government. Public financial enterprises are excluded from the scope of government finance statistics.

The transactions of government are classified according to an economic transactions framework and to purpose. The former classification is designed to categorise the economic character of a transaction to facilitate the study of the macro-economic impact of government activity on the economy, and to provide the basic building blocks for grouping transactions to be incorporated into the Australian National Accounts. The purpose classification groups transactions with similar functions to facilitate the study of the broad purposes of public sector spending and the assessment of the effectiveness of outlays in meeting government policy objectives.

To assist users in understanding government finance statistics, the ABS *Classifications Manual of Government Finance Statistics, Australia* (Cat. no. 1217.0) and *Government Finance Statistics: Concepts, Sources and Methods* (Cat. no. 5514.0) outline the major concepts, provide definitions of the statistical units, and contain the main classifications employed.

State government finance

In 1995–96, the overall financial outcome of the Victorian Government was reflected in a surplus of \$11,168 million, an increase from the 1994–95 surplus of \$702 million. Total current and capital outlays decreased by \$9,955 million to \$8,613 million, whereas total revenue increased by \$904 million to \$19,026 million. The deficit adjusted for net advances was -\$1,103 million, compared with -\$197 million for 1994–95.

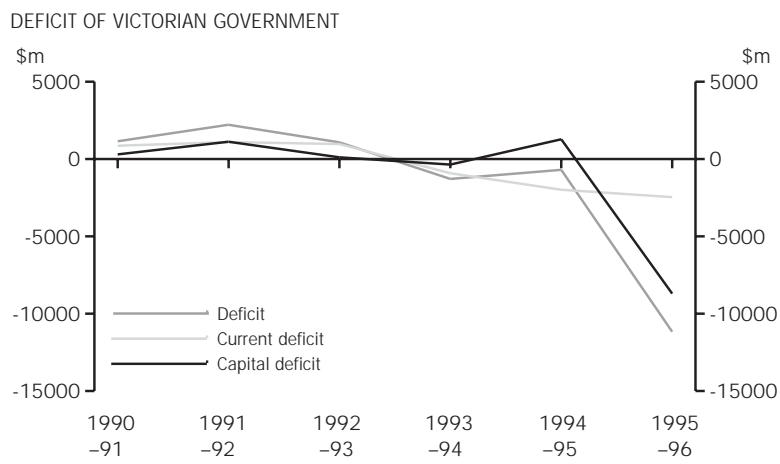
12.1 ECONOMIC TRANSACTIONS OF VICTORIAN STATE GOVERNMENT

Item	1990-91 \$m	1991-92 \$m	1992-93 \$m	1993-94 \$m	1994-95 \$m	1995-96 \$m
Current expenditure	10 253	10 922	11 347	11 142	11 403	11 906
<i>less</i> Sales of goods and services(a)	1 239	1 316	1 384	1 464	1 414	1 522
<i>equals</i> Final consumption expenditure	9 015	9 606	9 963	9 678	9 989	10 384
Interest payments	3 645	3 760	3 717	3 524	3 330	3 205
Subsidies paid to public trading enterprises	977	968	1 011	905	564	359
Current grants to other governments	343	416	426	412	457	458
Other transfer payments	1 261	1 576	1 866	1 985	2 095	2 199
<i>Total current outlays</i>	15 240	16 325	16 982	16 505	16 435	16 606
<i>plus</i> Expenditure on new fixed assets	2 709	2 453	2 475	2 362	2 613	2 281
<i>plus</i> Expenditure on secondhand assets (net)	-281	-162	-1 002	-240	58	-201
<i>equals</i> Gross fixed capital expenditure	2 428	2 290	1 472	2 122	2 671	2 079
Expenditure on land and intangible assets (net)	-7	-21	-30	-324	-115	-69
Capital grants to other governments	57	22	27	36	23	13
Advances paid (net)	-784	-240	-221	-1 295	-505	-10 065
Other capital outlays	20	85	29	28	59	50
<i>Total capital outlays</i>	1 715	2 137	1 277	567	2 133	-7 992
Total outlays	16 955	18 462	18 259	17 072	18 568	8 613
Taxes fees and fines	5 634	6 001	6 502	7 397	7 756	8 615
Net operating surplus of public trading enterprises	1 728	1 920	2 106	2 389	2 158	1 814
Interest received	281	215	206	201	218	322
Grants received						
for own use	5 481	5 202	5 403	5 449	5 634	5 947
for onpassing	1 357	1 525	1 600	1 679	1 818	1 868
Total grants received	6 838	6 727	7 003	7 128	7 452	7 815
Other revenue	347	456	451	440	539	460
Total revenue	14 828	15 320	16 269	17 556	18 122	19 026
Increase in provisions						
for depreciation	828	893	992	1 003	991	797
other	147	36	-83	-205	158	-42
Total increase in provisions	975	928	909	798	1 149	756
Advances received (net)	-731	-689	-583	-303	-476	-2 100
Borrowing (net)	2 378	3 025	3 219	-2 521	-786	-7 562
Other financing transactions	-495	-121	-1 556	1 542	560	-1 506
Total financing(b)	2 127	3 143	1 991	-485	446	-10 413
Deficit(c)	1 152	2 215	1 081	-1 283	-702	-11 168
Current deficit	856	1 094	968	-922	-1 985	-2 469
Capital deficit	296	1 121	113	-361	1 282	-8 699
Deficit adjusted for net advances(d)	1 935	2 454	1 302	13	-197	-1 103

(a) Sales of goods and services: The value of current general government output sold to other public and private bodies.

(b) Financing: The sum of transactions by which governments finance their deficits or invest their surpluses. Financing represents the difference between total revenue and total outlays. (c) Deficit: The sum of all outlays less revenue, less increases (decreases) in provisions. (d) Deficit adjusted for net advances: This measure is the deficit less net advances paid (which includes net injections/acquisitions or sales of equity, as well as other government lending for policy purposes).

Source: *Government Finance Statistics, Australia* (Cat. no. 5512.0).



Source: *Government Finance Statistics* (Cat. no. 5512.0).

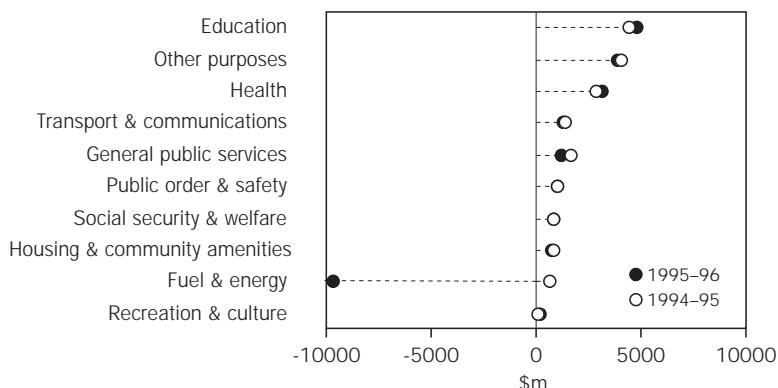
Outlays

Total current and capital outlays by the Victorian Government in 1995–96 were \$8,613 million, down from \$18,568 million in 1994–95. The major reason for the decrease was the privatisation of a number of Victorian Government State-owned businesses. Proceeds from these sales are treated as 'negative outlays' when compiling government finance statistics. Consequently 'outlays' on Fuel and energy fell from \$794 million in 1994–95 to \$–9,537 million in 1995–96, a decrease of \$10,331 million. Other main components were Education, \$4,844 million (56%), Health, \$3,271 million (38%) and Public debt, \$3,170 million (37%).

Current outlays in 1995–96 were \$16,606 million, which was an increase of 1% over the previous year. The largest component of this outlay was final consumption expenditure of \$10,384 million (63%), followed by interest payments \$3,205 million (19%).

Capital outlays in 1995–96 were \$–7,992 million, a decrease of 475% over 1994–95, due to the impact of the privatisation of the electricity industry. Gross fixed capital expenditure was \$2,079 million, a decrease of 22%.

VICTORIAN GOVERNMENT – OUTLAYS BY PURPOSE



Source: *Government Finance Statistics* (Cat. no. 5512.0).

12.2 VICTORIAN STATE GOVERNMENT — TOTAL OUTLAYS BY PURPOSE

Purpose	1990-91 \$m	1991-92 \$m	1992-93 \$m	1993-94 \$m	1994-95 \$m	1995-96 \$m
General public services	1 037	1 266	1 625	1 658	1 774	1 358
Public order and safety	992	1 017	1 041	1 056	1 134	1 183
Education						
Primary and secondary education	2 698	2 891	2 848	2 691	2 691	2 930
Tertiary education						
University education	813	896	943	962	1 005	1 031
Technical and further education	471	500	515	512	519	528
Total tertiary education	1 284	1 396	1 458	1 473	1 524	1 559
Other education	330	327	309	318	343	356
Total education	4 312	4 614	4 615	4 481	4 557	4 844
Health						
Hospital and other institutional services	2 497	2 572	2 547	2 408	2 531	2 762
Clinics and other non-institutional services	142	152	181	181	206	245
Other health	238	239	206	196	236	264
Total health	2 877	2 963	2 933	2 785	2 973	3 271
Social security and welfare						
Welfare services	564	614	710	668	709	721
Other social security and welfare	106	135	149	187	222	216
Total social security and welfare	670	749	859	854	931	937
Housing and community amenities						
Housing and community development	463	463	423	312	516	483
Water supply	157	148	85	74	288	356
Sanitation and protection of the environment	322	270	239	268	126	45
Other community amenities	1	15	26	25	21	30
Total housing and community amenities	944	896	774	678	951	913
Recreation and culture						
Recreational facilities and services	266	283	322	51	-472	129
Cultural facilities and services	102	120	117	140	225	220
Other recreation and culture	3	4	4	4	6	-22
Total recreation and culture	370	407	443	194	-240	328
Fuel and energy	614	553	-75	548	794	-9 537
Agriculture, forestry, fishing and hunting	228	222	219	227	247	265
Mining, manufacturing, construction etc.	34	48	-121	26	50	84
Transport and communications						
Road transport	743	746	834	-379	988	981
Water transport	45	27	-1	14	19	-10
Rail and multi-mode transport	775	810	810	775	492	389
Other transport and communications	11	16	4	6	7	19
Total transport and communications	1 574	1 600	1 647	417	1 506	1 380
Other economic affairs	120	320	152	187	199	144
Other purposes						
Public debt	3 796	3 604	3 709	3 514	3 312	3 170
Other	-612	206	439	445	380	273
Total other purposes	3 184	3 810	4 148	3 960	3 692	3 443
Total	16 955	18 462	18 259	17 072	18 568	8 613

Source: *Government Finance Statistics, Australia* (Cat. no. 5512.0).

Revenue

Revenue and grants received by the State government in 1995-96 was \$19,026 million, a 5% increase on 1994-95. The main components were taxes, fees, and fines \$8,615 million (45%), and grants received from the Commonwealth Government \$7,815 million (41%).

Taxes, fees, and fines

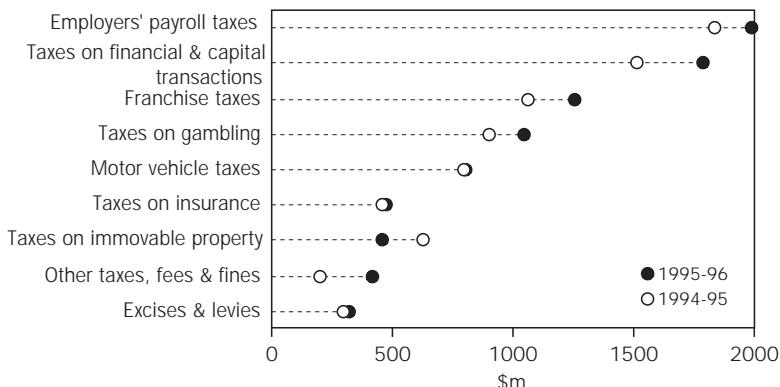
Taxes, fees, and fines increased 11% on 1994–95. The largest components were taxes on use of goods and performance of activities \$2,312 million (27%), and taxes on property \$2,253 million (26%). Casino taxes increased 62% on 1994–95, and poker machine taxes increased by 33%. Tobacco franchise taxes increased by 35%. Other taxes increased by \$239 million with the introduction of electricity industry franchise fees.

12.3 VICTORIAN STATE GOVERNMENT — TAXES, FEES, AND FINES

Item	1990–91 \$m	1991–92 \$m	1992–93 \$m	1993–94 \$m	1994–95 \$m	1995–96 \$m
<i>Employers' payroll taxes</i>	1 742	1 761	1 664	1 702	1 841	1 994
<i>Taxes on property</i>						
Taxes on immovable property						
Land taxes	416	465	481	409	396	393
Metropolitan improvement rates	43	50	51	58	61	62
Taxes on immovable property n.e.c.	—	—	173	181	180	7
Total taxes on immovable property	459	515	705	648	637	463
Taxes on financial and capital transactions						
Stamp duties	787	754	847	1 020	960	1 208
Financial institutions' taxes	325	409	410	540	557	570
Total taxes on financial and capital transactions	1 111	1 163	1 256	1 560	1 518	1 791
<i>Total taxes on property</i>	1 571	1 679	1 962	2 208	2 155	2 254
Government borrowing guarantee levies	—	—	—	—	—	13
<i>Taxes on provision of goods and services</i>						
Excises and levies						
Levies on statutory corporations	243	258	284	287	309	328
Total excises and levies	243	258	284	287	309	328
Taxes on gambling						
Taxes on private lotteries	300	300	290	286	297	298
Poker machine taxes	—	—	95	259	384	509
Casino taxes	—	—	—	—	68	110
Race betting taxes	180	192	198	202	144	122
Taxes on gambling n.e.c.	22	21	17	14	15	12
Total taxes on gambling	502	513	601	761	908	1 051
Taxes on insurance						
Insurance company contributions to fire brigades	149	160	164	162	162	164
Third party insurance taxes	—	—	4	59	65	67
Taxes on insurance n.e.c.	147	148	181	232	238	254
Total taxes on insurance	295	308	348	453	464	485
<i>Total taxes on provision of goods and services</i>	1 040	1 080	1 233	1 501	1 681	1 864
<i>Taxes on use of goods and performance of activities</i>						
Motor vehicle taxes						
Vehicle registration fees and taxes	122	229	311	375	383	387
Stamp duty on vehicle registration	206	196	223	260	305	331
Drivers' licences	64	76	77	93	106	92
Road transport and maintenance taxes	5	5	6	8	8	6
Total motor vehicle taxes	396	506	618	735	802	815
Franchise taxes						
Petroleum products franchise taxes	352	372	350	470	484	505
Tobacco franchise taxes	252	268	360	446	439	591
Liquor franchise taxes	149	153	140	144	147	162
Total franchise taxes	753	793	851	1 060	1 069	1 258
Other taxes on use of goods etc.	6	5	7	9	13	239
<i>Total taxes on use of goods and performance of activities</i>	1 154	1 304	1 475	1 805	1 884	2 312
<i>Fees and fines</i>						
Compulsory fees	49	50	50	59	65	66
Fines	78	127	119	122	130	124
<i>Total fees and fines</i>	127	178	169	181	194	190
Total	5 634	6 001	6 502	7 397	7 756	8 615

Source: *Taxation Revenue, Australia* (Cat. no. 5506.0).

VICTORIAN GOVERNMENT – TAXES LEVIED



Source: *Taxation Revenue, Australia* (Cat. no. 5506.0).

Local government finance

In 1995–96, the overall financial position of Victorian local government was reflected in a surplus of \$479 million, an increase from the surplus of \$47 million in 1994–95.

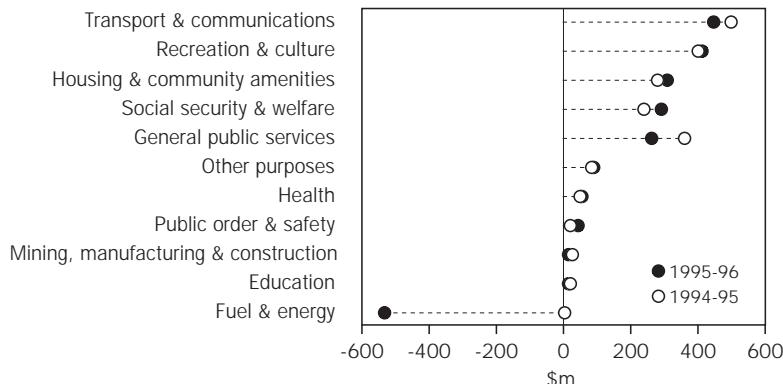
Total current and capital outlays for Victorian local government in 1995–96 were \$1,474 million, a 28% decrease on 1994–95. Final consumption expenditure was \$1,664 million, an increase of 12%. Gross fixed capital expenditure was \$326 million, a decrease of 31%.

The most significant outlays were on Transport and communications \$452 million (31%), Recreation and culture \$416 million (28%), and Housing and community amenities \$317 million (21%). Other areas of significant expenditure included Social security and welfare \$295 million (20%), and Administration \$268 million (18%).

Compensation received for the transfer of municipal electricity supply assets to the Victorian Government prior to privatisation resulted in a \$540 million decrease in Fuel and energy outlays between 1994–95 and 1995–96.

Local government revenue in 1995–96 was \$1,953 million, a 7% decrease over 1994–95. Taxes, fees, and fines made up 66% of total revenue.

VICTORIAN LOCAL GOVERNMENT – OUTLAWS BY PURPOSE



Source: *Government Finance Statistics* (Cat. no. 5512.0).

12.4 ECONOMIC TRANSACTIONS OF VICTORIAN LOCAL GOVERNMENT

Item	1990-91 \$m	1991-92 \$m	1992-93 \$m	1993-94 \$m	1994-95 \$m	1995-96 \$m
Current expenditure	2 020	2 064	2 211	2 315	2 200	2 344
<i>less</i> Sales of goods and services(a)	602	589	614	754	717	680
<i>equals</i> Final consumption expenditure	1 418	1 475	1 597	1 561	1 483	1 664
Interest payments	190	123	127	89	69	55
Other transfer payments	38	30	—	—	—	—
<i>Total current outlays</i>	1 647	1 627	1 723	1 650	1 552	1 718
Gross fixed capital expenditure	367	347	553	512	476	326
Expenditure on land and intangible assets (net)	8	10	24	14	15	-33
Other capital outlays	-4	-7	—	—	—	-537
<i>Total capital outlays</i>	371	351	577	526	492	-244
Total outlays	2 018	1 978	2 300	2 176	2 044	1 474
Taxes fees and fines	1 392	1 362	1 493	1 513	1 409	1 287
Net operating surplus of public trading enterprises	74	54	52	60	6	—
Interest received	112	84	111	107	95	74
Grants received	432	495	603	564	576	589
Other revenue	58	50	4	5	4	2
Total revenue	2 069	2 045	2 263	2 249	2 090	1 953
Increase in provisions	10	11	11	9	1	—
Advances received (net)	-1	—	5	13	14	4
Borrowing (net)	64	68	-99	-69	-74	-144
Other financing transactions	-124	-146	120	-25	13	-339
Total financing(b)	-51	-67	37	-72	-46	-479
Deficit(c)	-61	-78	26	-81	-47	-479
Current deficit	-322	-362	-423	-556	-487	-219
Capital deficit	262	284	450	475	440	-260
Deficit adjusted for net advances(d)	-57	-71	26	-81	-47	58

(a) Sales of goods and services: The value of current general government output sold to other public and private bodies.

(b) Financing: The sum of transactions by which governments finance their deficits or invest their surpluses. Financing represents the difference between total revenue and total outlays. (c) Deficit: The sum of all outlays less revenue, less increases (decreases) in provisions. (d) Deficit adjusted for net advances: This measure is the deficit less net advances paid (which includes net injections/acquisitions or sales of equity, as well as other government lending for policy purposes).

Source: *Government Finance Statistics, Australia* (Cat. no. 5512.0).

12.5 VICTORIAN LOCAL GOVERNMENT — TOTAL OUTLAYS BY PURPOSE

Item	1990-91 \$m	1991-92 \$m	1992-93 \$m	1993-94 \$m	1994-95 \$m	1995-96 \$m
General public services	407	421	364	385	364	268
Public order and safety	41	43	44	31	30	51
Education	29	30	36	27	26	25
Health	71	72	63	59	56	61
Social security and welfare	205	226	261	256	244	295
Housing and community amenities						
Housing and community development	55	53	67	62	60	85
Sanitation and protection of the environment	146	139	180	181	173	179
Other community amenities	54	59	50	52	49	54
Total housing and community amenities	254	252	298	295	283	317
Recreation and culture						
Recreational facilities and services	219	220	303	305	296	293
Cultural facilities and services	99	104	112	117	111	123
Other recreation and culture	4	4	—	—	—	—
Total recreation and culture	323	327	414	422	407	416
Fuel and energy	30	20	25	30	3	-537
Agriculture, forestry, fishing and hunting	2	2	1	—	—	1
Mining, manufacturing, construction etc.	35	32	35	35	33	25
Transport and communications	439	457	593	522	504	452
Other economic affairs	45	49	46	48	47	60
Other purposes	136	45	119	65	46	39
Total	2 018	1 978	2 300	2 176	2 044	1 474

Source: *Government Finance Statistics, Australia* (Cat. no. 5512.0).

Public sector financial assets and liabilities

Public sector financial asset and liability statistics show the stock of financial assets and liabilities of the public sector at the end of the fiscal year, whereas government finance statistics show the transactions (flows) undertaken by the public sector during the year. The statistics encompass deposits made or held by Victorian State and local governments, equity and non-equity assets and liabilities, and all lending and borrowing undertaken by those governments.

The financial liabilities of the Victorian State and local governments were \$26,296 million at 30 June 1996. Offset against this amount were financial assets of \$5,809 million, resulting in a net debt of \$20,487 million. The substantial reduction in net debt of \$11,158 million, during the year ended 30 June 1996, was mainly due to debt retirement from asset sales in the electricity industry. The value of assets sold was approximately \$10,800 million.

Financial assets cover the financial claims of the public sector on other organisations (including other government authorities and overseas organisations) and households. They exclude shares and other equity, and financial assets related to trade credit and accounts receivable. Financial assets are shown before deduction of provisions for doubtful debts.

Liabilities include all financial claims on the public sector, except contingent liabilities, liabilities related to trade credit and other accounts payable. They include lease liabilities under finance leases or similar arrangements, and repayable amounts held as security deposits.

Monies held on trust (excluding employee superannuation contributions) are included both as assets and liabilities of government. Coin on issue is not included as a liability of government.

Liabilities for unfunded employee entitlements are the accrued liability of employers to pay future benefits to employees including superannuation, sick leave paid on resignation or retirement, recreation leave, long service leave, workers compensation (where the benefits are paid by the employer and not by a separate insurer) and accrued salaries and wages. Liabilities are 'unfunded' if money has not been paid into a separately constituted fund to provide for their future payment.

12.6 FINANCIAL ASSETS AND LIABILITIES OF VICTORIAN STATE AND LOCAL GOVERNMENTS

Item	30 June 1995 \$m	30 June 1996 \$m
Liabilities		
Deposits held	278	206
Advances received	2 845	968
Other borrowings	32 932	25 123
Gross debt	36 056	26 296
Financial assets		
Cash and deposits	903	935
Advances paid	431	446
Other lending	3 076	4 429
Total cash, deposits, and lending	4 411	5 809
Net debt	31 645	20 487
Unfunded employee entitlements	17 668	17 685

Source: *Public Sector Financial Assets and Liabilities, Australia* (Cat. no. 5513.0).

Commonwealth-State financial relations

The major institutions that assist in the management of Commonwealth funding to State and Territory governments, and local government are: the Premiers' Conference, the Australian Loan Council, the Council of Australian Governments, the Commonwealth Grants Commission, and local government grants commissions.

Premiers' Conference

The annual Premiers' Conference determines the total amount of general revenue assistance, and the share for each State and the Territories. Although these payments are at the Commonwealth's discretion, they are subject to negotiation between the Commonwealth and States at the Conference.

The Premiers' Conference was held on 21 March 1997, prior to the Commonwealth Government bringing down its 1997-98 budget in May 1997. The Conference was assisted by the preparation and release of the National Fiscal Outlook (NFO) for 1997. The NFO presented medium-term projections of Commonwealth and State general government finances based on policy settings as at February 1997.

Australian Loan Council

The Loan Council has responsibility for determining the annual borrowing programmes of the Commonwealth and State Governments. In February 1994, a new Financial Agreement was signed by the Council of Australian Governments, which redefined the Loan Council's role. Under the new Agreement, the Loan Council has the power to make resolutions on the borrowings, raisings, and other financial arrangements of governments. At its meeting of 21 March 1997, the Loan Council considered the 1997-98 Loan Council Allocations nominated by the Commonwealth and each State.

Commonwealth Grants Commission

The Commonwealth Grants Commission makes recommendations to the Commonwealth on the distribution of financial assistance grants and hospital grants across the States. The Grants Commission does this using per capita relativities, which it calculates after analysing each State's pattern of expenditure and revenues. Each State's relativity is expressed as its need for general revenue assistance relative to the Australian average.

Victoria Grants Commission

The principal role of the Victoria Grants Commission is to determine the allocation of general revenue grants provided by the Commonwealth Government to the State for distribution to local government in Victoria. Commonwealth legislation sets out how the total allocations are to be determined and lays down a basic framework within which the local government grants commissions of the States make their determinations. The Victoria Grants Commission is established under State legislation.

Commonwealth financial assistance

Commonwealth payments to the State and Territory governments may be classified under two main headings—general purpose payments and specific purpose payments.

General purpose payments provide general budgetary assistance, and the State and Territory governments are free to determine the spending of these monies according to their own budgetary priorities.

Specific purpose payments are a means of meeting the objectives and priorities of Commonwealth Budget programmes. The payments are provided subject to certain conditions, for example—the Commonwealth may decide the purpose for which the funds are to be spent; or the States may be required to contribute some of their own funds to the programme to qualify for the assistance.

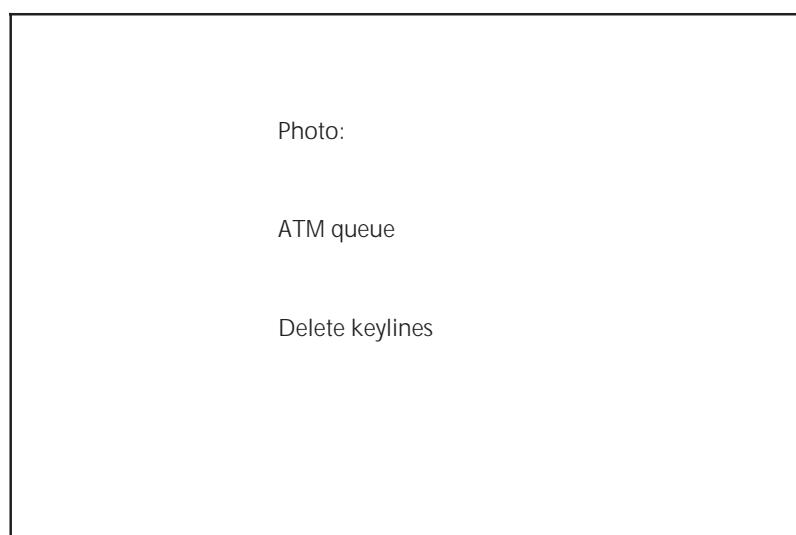
Further details of the Commonwealth Government relations with the States and local government are contained in *Commonwealth Budget Paper No 3: Federal Financial Relations 1997–98*, and *Final Budget Outcome 1996–97*.

In 1996–97, total Commonwealth payments to Victoria totalled \$8,453 million, a 13% increase on 1995–96. General purpose funds totalled \$3,564 million, a 6% increase on 1995–96. Specific purpose grants for current and capital purposes totalled \$4,889 million, an 18% increase on 1995–96. Education and health together comprised 62% of total specific purpose grants.

12.7 COMMONWEALTH GOVERNMENT PAYMENTS TO VICTORIAN STATE AND LOCAL GOVERNMENTS

Nature of Payment	1991–92 \$m	1992–93 \$m	1993–94 \$m	1994–95 \$m	1995–96 \$m	1996–97 \$m
General Revenue Assistance	2 649	2 780	2 957	3 113	3 328	3 553
General Purpose Capital Assistance	85	105	137	40	35	11
Specific Purpose Payments						
General public services	57	69	72	74	84	94
Public order and safety	31	34	34	34	38	140
Education	1 618	1 787	1 751	1 789	1 812	1 813
Health	1 066	1 142	1 159	1 173	1 233	1 235
Social security and welfare	117	174	207	223	241	237
Housing and community amenities	226	230	215	237	224	238
Agriculture, forestry and fishing	46	53	13	18	15	20
Mining, manufacturing and construction	63	4	4	5	4	6
Transport and communication	292	393	205	149	150	123
Other economic affairs and purposes	266	103	75	82	68	695
Total Specific Purpose Payments	4 035	4 248	3 995	4 044	4 145	4 889
Financial Assistance						
Local Government	253	259	260	260	276	287
Total Commonwealth Payments	6 769	7 133	7 089	7 197	7 508	8 453

Source: Commonwealth Budget Paper Number 3: *Federal Financial Relations; Final Budget Outcome*.



PRIVATE FINANCE

The Australian financial system includes banks and a range of non-bank financial institutions such as building societies, credit co-operatives, money market corporations, finance companies, insurance companies, superannuation funds and various forms of fund managers such as unit trusts.

Reserve Bank of Australia

The Reserve Bank of Australia acts as Australia's central bank. As well as formulating and implementing monetary policy, it maintains prudential supervision of banks in relation to large credit exposure. Its responsibilities include preserving confidence in the banking system as a whole, and promoting the stability and integrity of the banking system and the payments system protecting bank deposits.

Legislation

The major legislation relating to the operation and management of banks in Australia are the *Banking Act 1959*, the *Reserve Bank Act 1959*, and the *Commonwealth Banks Act 1959* (all Commonwealth Government Acts). Since 1980 there have been substantial changes in the Australian financial system, as a result of the recommendations of the Campbell Committee, and later of the Martin Review Committee. These reviews have led to substantial deregulation of the Australian financial system (particularly in respect to the relaxation of controls on most bank interest rates and the foreign exchange rate) and the entry of new banks into the system.

Significant amendments were made to the Banking Act in 1990. These formalised supervision requirements, and restructured the banking industry by abolishing the distinction between trading and savings banks.

In 1992 the Banking Act was further amended to permit new foreign banks to apply for a banking authority in Australia and to allow foreign banks (including those already in Australia) to operate with a branch structure, provided they are able to meet the Reserve Bank's prudential requirement.

In April 1997, the Financial System Inquiry (the Wallis Committee) made recommendations on competition in and regulation of the Australian financial system, including the establishment of a common regulatory framework for overlapping financial products.

Banks

At the end of June 1997, there were fifty banks operating in Australia. All are authorised to operate by the Banking Act 1959. Thirty-two banks have branches in Victoria.

12.8 BANKS, NUMBER OF BRANCHES AND AGENCIES, VICTORIA

Banks	At 30 June 1996		At 30 June 1997	
	Branches	Agencies	Branches	Agencies
Commonwealth Bank of Australia	486	1 053	450	1 060
National Australia Bank	342	40	317	49
ANZ Banking Group	325	10	277	17
Westpac Banking Corporation	232	11	212	4
Bank of Melbourne	121	109	125	109
Bendigo Bank	73	84	68	78
St. George Bank	29	5	36	5
Colonial State Bank(a)	—	—	22	29
Suncorp-Metway Bank	7	—	7	—
Citbank(b)	5	1 082	4	434
Challenge Bank(a)(b)	19	645	—	—
State Bank of New South Wales(a)	10	—	—	—
Other Banks	30	1	28	—
Total Banks	1 679	3 040	1 546	1 785
Metropolitan Area	1 116	1 666	996	1 001
Remainder of Victoria	563	1 374	550	784
GiroPost Network(b)	—	—	—	649

(a) Challenge Bank and the State Bank of New South Wales merged to form the Colonial State Bank during 1996–97. (b) The GiroPost Network is an electronic banking system which is available through Australia Post retail outlets and agencies. Citibank and Challenge Bank linked up with the GiroPost Network during 1995–96.

Source: Reserve Bank of Australia.

Deposits and loans

In the three years to June 1997 deposits held in customers accounts at banks increased 21% to a total of \$79,483 million. Loans to customers accounts grew by 23% to a total of \$80,783 million at June 1997. Term and at call accounts represented 57% of total deposits held in customers accounts in June 1997.

12.9 BANKS, DEPOSITS AND LOANS TO CUSTOMERS ACCOUNTS, VICTORIA

Period	Deposits repayable in Australia					
	Current bearing interest \$m	Current not bearing interest \$m	Term and at call \$m	Other \$m	Total \$m	Other lending \$m
As at June						
1995	10 834	3 165	37 460	14 043	65 510	65 400
1996	13 374	3 184	41 209	13 518	71 285	73 304
1997	15 721	3 297	45 603	14 862	79 483	80 783

(a) Average of weekly figures for month of June.

Source: Reserve Bank of Australia.

Non-bank financial institutions

There are a number of categories of financial institutions such as building societies, credit co-operatives, money market corporations and other types of institutions which, in addition to banks, play an important part in financial activities in Australia.

Both Commonwealth and State legislation regulate the activities of these institutions. The *Financial Corporations Act 1974* (Commonwealth) requires that financial corporations register with the Reserve Bank, and that they provide statistics to the Reserve Bank on a quarterly basis (for corporations with assets in excess of \$1 million) or monthly (for those with assets exceeding \$5 million).

Australian Financial Institutions Commission

In July 1992 legislation was introduced to provide for a national regulatory body, the Australian Financial Institutions Commission, to coordinate standards for the prudential supervision of building societies and credit unions, although responsibility for the day to day supervision of such institutions remains with individual States.

Permanent building societies

The operations of permanent building societies in Victoria are regulated by the *Financial Institutions (Victoria) Act 1992*, which is administered by the Victorian Financial Institutions Commission. All permanent building societies must be registered with the Commission.

The number of permanent building societies in Victoria declined from eight in 1992-93 to four at the end of 1995-96, reflecting recent trends such as amalgamation between building societies and the conversion of some into banks. The assets of permanent building societies in Victoria at the end of 1995-96 totalled \$1,301 million, a decrease of 54% over 1994-95. Total income of building societies exceeded total expenditure in 1995-96 by \$5 million.

12.10 PERMANENT BUILDING SOCIETIES, VICTORIA

Particulars	1992-93	1993-94	1994-95	1995-96
Number of societies	8	6	6	4
Income and expenditure(\$m)				
Income				
Interest from loans	168.4	169.6	207.3	97.4
Interest from investments	25.5	21.3	25.6	15.2
Other income	22.2	21.9	22.9	6.7
Total	216.1	212.9	255.8	119.3
Expenditure				
Interest on deposits	106.5	97.0	117.1	66.7
Interest on loans	9.8	12.6	27.0	14.0
Other expenditure	84.4	83.8	96.7	33.5
Total	200.6	193.3	240.9	114.2
Assets and liabilities(a)(\$m)				
Assets				
Amounts owing on loans	1 717.0	2 004.7	2 286.7	1 043.7
Cash on hand	10.2	10.4	8.2	2.2
Deposits with banks	80.9	136.7	161.4	61.0
Deposits with other institutions	48.5	37.7	26.1	40.3
Bills, bonds, and other securities	280.6	262.6	239.2	133.9
Physical and other assets	114.3	105.6	110.3	20.2
Total	2 251.5	2 557.6	2 831.8	1 301.3
Liabilities				
Share capital	89.4	101.8	105.8	77.2
Reserves(b)	86.7	87.0	106.3	-0.8
Deposits	1 969.4	2 054.9	2 199.4	934.9
Loans	49.8	256.0	336.9	264.3
Other liabilities	56.0	57.9	83.5	25.7
Total	2 251.5	2 557.6	2 831.8	1 301.3

(a) At the balance dates of societies within the financial year shown. (b) Includes accumulated surpluses and deficits.

Source: Australian Financial Institutions Commission.

**Credit
co-operatives**

The operations of credit co-operatives are also governed by the *Financial Institutions (Victoria) Act 1992*, and likewise credit co-operatives have to register with the Victorian Financial Institutions Commission.

There were 70 credit co-operatives in Victoria at the end of 1995-96, down from 90 in 1992-93. The assets of credit co-operatives increased by 8% from 1994-95 to 1995-96. Income exceeded expenditure by \$26 million in 1995-96.

12.11 CREDIT CO-OPERATIVES, VICTORIA

Particulars	1992-93	1993-94	1994-95	1995-96
Number of credit co-operatives	90	76	72	70
Income and expenditure(\$m)				
Income				
Interest from loans	144.7	157.5	178.9	202.5
Interest from investments	23.8	25.4	30.9	39.1
Other income	14.0	19.8	23.9	22.8
Total	182.5	202.6	233.7	264.4
Expenditure				
Interest on deposits	70.6	68.6	84.2	106.6
Interest on loans	0.3	0.3	0.7	0.3
Other expenditure	95.9	114.1	124.9	131.5
Total	166.8	183.0	209.8	238.4
Assets and liabilities(a)(\$m)				
Assets				
Amounts owing on loans(b)	1 502.7	1 623.7	1 827.5	1 987.8
Cash on hand	14.0	11.5	11.1	12.0
Deposits with banks	46.5	60.1	46.0	54.1
Deposits with other institutions	25.2	23.0	9.8	2.3
Bills, bonds, and other securities	489.1	485.5	457.9	495.8
Physical and other assets	105.9	107.5	107.1	115.2
Total	2 183.4	2 311.3	2 459.3	2 667.2
Liabilities				
Reserves(c)	176.2	199.2	223.3	247.9
Deposits	1 960.9	2 053.4	2 174.9	2 346.2
Loans	9.7	18.9	10.3	17.4
Other liabilities	36.5	39.7	50.8	55.7
Total	2 183.4	2 311.3	2 459.3	2 667.2

(a) At the balance dates of societies within the financial year shown. (b) Includes finance lease receivables, also net of unearned interest and allowance for doubtful debts. (c) Includes accumulated surpluses and deficits.

Source: Australian Financial Institutions Commission.

Lending activity of financial institutions

Housing finance for owner occupation increased 5% to \$10,152 million in 1995-96, and increased a further 12% to \$11,345 million in 1996-97. Personal finance was 20% higher in 1996-97 than in 1994-95, whilst commercial finance increased by 51% over the same period. Lease finance showed an overall increase over the three-year period of 10%.

Banks increased their commercial finance commitments by 55% from 1994-95 to 1996-97. Banks were the dominant lender in all areas except lease finance. Other lenders lifted their share of housing finance for owner occupation from 2% in 1994-95 to 10% in 1995-96.

12.12 TYPE OF FINANCIAL COMMITMENT BY LENDER, VICTORIA

Lender	Housing finance for owner occupation \$m	Personal finance \$m	Commercial finance \$m	Lease finance \$m
At 30 June 1995				
Banks	9 127.0	4 901.6	19 003.0	417.2
Finance companies	—	1 069.2	1 594.0	532.8
Permanent building societies	376.9	—	—	—
Credit cooperatives	—	427.5	—	—
Money market corporations	—	—	2 162.6	124.6
Other	167.8	353.1	2 237.4	401.4
Total	9 671.7	6 751.4	24 997.0	1 476.0
At 30 June 1996				
Banks	9 162.3	5 767.8	32 551.5	538.6
Finance companies	—	1 098.2	1 741.7	554.9
Permanent building societies	179.4	—	—	—
Credit cooperatives	—	409.1	—	—
Money market corporations	—	—	5 116.6	130.0
Other	810.6	309.0	2 370.0	349.9
Total	10 152.3	7 584.1	41 779.8	1 573.4
At 30 June 1997				
Banks	9 993.4	6 090.7	29 404.8	537.4
Finance companies	—	1 271.7	1 618.1	593.4
Permanent building societies	214.3	—	—	—
Credit cooperatives	—	408.7	—	—
Money market corporations	—	—	4 773.1	155.1
Other	1 137.1	309.6	1 847.3	333.7
Total	11 344.8	8 080.7	37 643.3	1 619.6

Source: *Housing Finance for Owner Occupation (5609.0); Personal Finance, Australia; Commercial Finance, Australia; Lease Finance, Australia*.

Other financial institutions

Other non-bank financial institutions which play an important part in financial activities in Victoria include: money market corporations, finance companies, general financiers, pastoral finance companies, life insurance offices, health insurance offices, superannuation funds, approved deposit funds, cash management trusts, public unit trusts, common funds, friendly societies, co-operative housing societies, general insurance companies, managed funds, securitisers, and financial markets. Statistical data for these institutions are generally available on an Australian basis only, and can be referenced in *Year Book Australia* (Cat. no. 1301.0).

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The statistics on government financial assets and liabilities are based on data supplied by the Victorian Government and used by them in compiling financial asset and liability statistics for inclusion in their budget documentation. Estimates of local government debt were derived from data compiled for the ABS's Local Government Finance statistics series.

Local Government Finance statistics for Victoria are collected jointly with the Victoria Grants Commission.

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The Reserve Bank of Australia

Victorian State Government

Victoria Grants Commission

Chapter 13

Manufacturing

Photo:

Portland smelter

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OVERVIEW

Manufacturing broadly relates to the physical or chemical transformation of materials or components into new products, whether the work is performed by power-driven machines or by hand.

Manufacturing remains Victoria's most important industry, despite a fall in Gross State Product at Factor Cost (GSP(fc)) since 1984-85 from 22% to 18% (\$19,880 million) in 1995-96. The second largest contributor to GSP(fc) was Property and Business Services (10%) which recorded a 7% increase over the same period.

Victorian employment in the manufacturing sector accounts for 32% of total manufacturing employment in Australia. Victorian employment in the Manufacturing industry over the last 22 years has declined from 470,000 at 30 June 1974 to 292,600 at 30 June 1996.

This chapter presents a range of data about employment, wages and salaries, production, Gross State Product at factor cost, turnover and exports for the manufacturing sector as a whole. This chapter also contains a special feature from the Australian Chamber of Manufactures which outlines the history, trends and forecasts for the manufacturing industry in Victoria and Australia.

13.1 INDUSTRY CONTRIBUTION TO GSP(fc), 1995-96(a)

	Victoria %	Australia %
Agriculture, forestry and fishing	3	4
Mining	3	5
Manufacturing	18	15
Electricity, gas and water	3	3
Construction	6	7
Wholesale trade	7	6
Retail trade	7	8
Accommodation, cafes and restaurants	2	2
Transport and storage	5	5
Communication	3	3
Finance and insurance	4	4
Property and business services	10	9
Government administration and defence	3	4
Education	5	5
Health and community services	7	6
Culture and recreational services	2	2
Personal and other services	2	2
Ownership of dwellings	9	10
General government(b)	2	2
Total	100	100

(a) Industries may not add to total due to rounding differences. (b) State details for general government gross operating surplus by industry are not available.

Source: Australian National Accounts: State Accounts (Cat. no. 5220.0).

Turnover

Turnover is a key measure of the performance of establishments in an industry. It covers the sales of goods and services by an establishment (together with transfers of goods to other parts of the same business) and also includes all other operating revenue generated by the establishment.

Turnover for the Manufacturing industry in Victoria was \$63,768 million for 1995–96 recording an increase of 4.8% over the last twelve months and 15.6% over the last five years. The largest industry subdivisions contributing to total Victorian turnover were Machinery (24.9%), Food (20.1%), Petroleum (16.9%) and Metal (13.2%). These subdivisions have consistently dominated over the last five years and all industries recorded an increase over this period with the exception of Textile, clothing, footwear and leather which recorded a drop of 5.6%.

13.2 TURNOVER(a) BY MANUFACTURING SUBDIVISION, VICTORIA

Industry subdivision	1990–91 \$m	1991–92 \$m	1992–93 \$m	1993–94 \$m	1994–95 \$m	1995–96 \$m
Food, beverage and tobacco	10 548.8	10 599.5	11 114.4	11 704.9	12 300.6	12 817.9
Textile, clothing, footwear and leather	4 755.7	4 618.9	4 444.3	4 670.3	4 344.4	4 487.7
Wood and paper product	2 626.6	2 518.7	2 825.8	3 017.2	3 154.3	3 257.5
Printing, publishing and recorded media	3 346.5	3 348.7	3 654.1	3 883.9	4 169.4	4 369.8
Petroleum, coal, chemical and associated product	9 612.9	9 516.0	9 626.2	9 976.7	10 387.7	10 798.6
Non-metallic mineral product	1 923.3	1 742.1	2 082.0	2 089.1	2 010.1	2 117.0
Metal product	7 837.3	7 484.2	7 189.0	7 438.4	7 703.6	8 385.6
Machinery and equipment	13 010.9	12 112.3	13 254.0	14 306.2	15 063.1	15 886.2
Other manufacturing	1 491.3	1 401.3	1 477.9	1 658.6	1 721.8	1 647.6
Total manufacturing	55 153.3	53 341.5	55 667.8	58 745.2	60 855.1	63 768.0

(a) Value data are at current prices and, therefore, do not discount the impact of price changes.

Source: *Manufacturing Industry, Victoria, 1995–96* (8221.2).

Employment

Employment in the Victorian manufacturing industry increased by 0.4% to 292,600 persons over the last twelve months. 71,000 or 24.4% of persons were employed in the Machinery and equipment manufacturing subdivision followed by 43,000 (14.7%) for Food, beverage and tobacco. The highest recorded employment increase occurred in the Machinery and equipment manufacturing subdivision (4.3%) while the largest decrease was recorded in Other manufacturing (4.9%).

Over a five year period the Textile, clothing and footwear subdivision recorded the largest decline in employment (17.9%), while the largest growth occurred in Printing, publishing and recorded media (7.9%).

13.3 EMPLOYMENT(a) BY MANUFACTURING SUBDIVISION

Industry subdivision	1990–91 '000	1991–92 '000	1992–93 '000	1993–94 '000	1994–95 '000	1995–96 '000
Food, beverage and tobacco	48.2	46.3	44.2	44.1	45.1	43.0
Textile, clothing, footwear and leather	43.8	39.4	38.1	36.1	35.4	36.0
Wood and paper product	15.9	15.0	15.4	16.0	16.6	17.0
Printing, publishing and recorded media	27.4	26.1	27.2	26.4	28.5	29.5
Petroleum, coal, chemical and associated product	35.3	34.5	34.1	33.5	35.6	34.6
Non-metallic mineral product	11.1	10.2	10.0	9.9	9.5	9.4
Metal product	39.9	36.7	35.2	35.4	36.2	36.5
Machinery and equipment	84.8	75.4	72.8	69.0	68.4	71.3
Other manufacturing	15.9	14.9	15.3	15.5	15.9	15.2
Total manufacturing	322.3	298.5	292.2	285.9	291.4	292.6

(a) Includes working proprietors.

Source: *Manufacturing Industry, Victoria* (8221.2).

Production

In 1996–97 Victorian enterprises accounted for more than half the national production of whole milk (62%), butter and butteroil (82%), cheese (62%), cotton yarn (61%), wool yarn (86%) and plastics in primary forms (67%).

Victorian manufacturers also accounted for a large proportion of national production of vehicles for goods and materials (48%), cotton and wool woven fabric (36% and 42% respectively) and the production of lamb (41%).

13.4 PRODUCTION OF SELECTED MANUFACTURING COMMODITIES, 1996–97

Item	Unit	Victoria	Australia	Victoria as % of Australia
Meat (carcass weight)				
Beef and veal	'000 tonnes	388 130	1813 569	21.4
Mutton	'000 tonnes	55 417	307 947	18.0
Lamb	'000 tonnes	111 362	274 646	40.5
Pig meats	'000 tonnes	85 756	324 468	26.4
Dairy products(a)				
Whole milk	million litres	5 622	9 024	62.3
Butter and butteroil	tonnes	120 041	146 949	81.7
Cheese	tonnes	164 079	264 689	62.0
Wheat flour (other than self-raising)	tonnes	227 170	1 555 850	14.6
Yarns				
Cotton	tonnes	24 115	39 853	60.5
Wool	tonnes	15 692	18 285	85.8
Woven fabric				
Cotton	'000 sq m	21 737	60 617	35.9
Wool	'000 sq m	2 674	6 300	42.4
Vehicles for goods and materials	'000	13	27	47.7
Plastics in primary forms	'000 tonnes	825	1 236	66.8
Building materials				
Clay bricks for structural purposes	million	264	1 467	18.0
Ready mix concrete	'000 cu metres	3 169	15 394	20.6

Source: *Livestock products, Australia* (7215.0); *Manufacturing Production, Australia* (8301.0); *Australian Dairy Corporation*.

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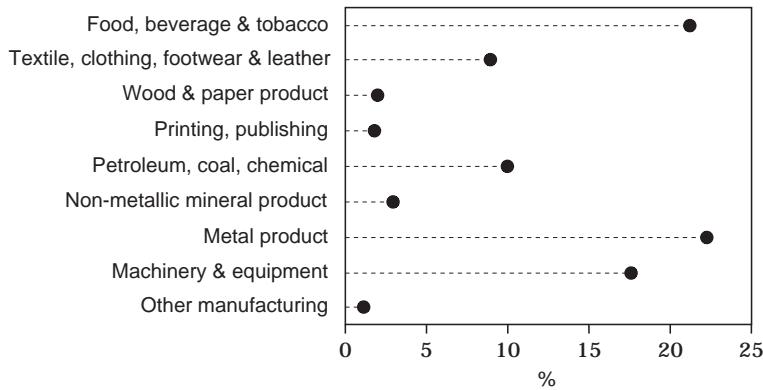
ACM automated assembly

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Exports by manufacturers

Exports by manufacturers relates to the percentage of sales of goods produced, plus transfers out of goods produced by the manufacturing establishment for sale, which are exported by the business or an agent on the organisation's behalf.

During 1995–96 the percentage of the sales of goods produced in the Victorian manufacturing industry which were subsequently exported by the manufacturer or its agent was 14.6% and were valued at \$68,454.3 million. The industry subdivisions with the highest percentage contributions were Metal product (22.3%), Food, beverage and tobacco (21.3%) and Machinery and equipment (17.7%). However the Machinery and equipment (\$2,660 million) and Food, beverage and tobacco (\$2,654 million) recorded the highest values of goods exported.

EXPORTS OF GOODS PRODUCED BY MANUFACTURERS, VICTORIA, 1995–96

Source: *Manufacturing Industry, Victoria* (Cat. no. 8221.2).

Photo:

Toyota factory

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MANUFACTURING PROSPECTS LOOK POSITIVE FOR VICTORIA OVER 1998

This article has been supplied by the Australian Chamber of Manufactures and was prepared in December 1997.

The article will outline the history, trends and forecasts for the manufacturing industry in Victoria and Australia over 1998. The forecasts are based on the Australian Chamber of Manufactures Survey of Australian Manufacturing which covers over 750 manufacturers throughout Australia which is approximately 15% of national manufacturing turnover.

The manufacturing industry is a major sector of the economy in Victoria and Australia. Manufacturing activity nationally accounts for over 15% of national production (18.7% in Victoria), has an annual turnover of \$192 billion (\$62 billion in Victoria), employs over 1.1 million people (over 295,500 people in Victoria) and accounts for more than \$48 billion in export earnings.

Manufacturing production

The manufacturing industry in Victoria and Australia has been characterised by two significant downturns in activity over the past three years. However, the difference for Victorian Gross State Product (GSP) (see chart below) is that the first downturn in activity remained relatively mild with the second downturn in activity having a major impact on the State.

Nationally, in a period of only 12 months, the trend rate of annual manufacturing production fell from 7.97% in the September 1994 quarter to -0.95% in the September 1995 quarter. Over this period, the manufacturing industry was characterised by recessionary demand, weak production, intense market competition and plummeting profits, particularly for those firms closely linked to the housing market. However, these trends took some time to filter through and effect Victorian GSP due to the importance of the pharmaceutical and automotive sectors to the Victorian economy and Victoria's strong export orientation.

From the revised ABS data series, the annual trend in national manufacturing production did recover to grow by 4.04% in the March 1996 quarter. Since this quarter, manufacturing production again declined until the June 1997 quarter. This period was where Victorian GSP fell considerably, from 6.3% in December 1995 to 4.1% in December 1996.

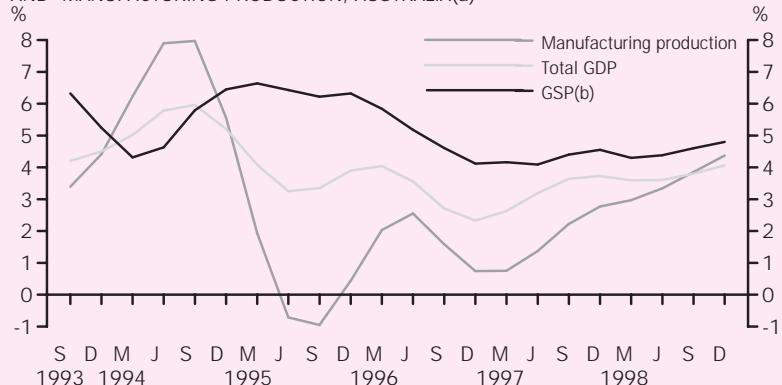
Overall growth for Australia for the year to June 1997 has been 3.2% and is forecast to improve over 1998 as shown in the chart below (forecast to be 4.1% in the December 1998 quarter). This compares with overall growth in the manufacturing sector running at around 4.4% by December 1998. For Victoria, GSP growth has remained relatively stable at around 4.1% for the June 1997 quarter and this is expected to show improvement over 1998 reaching 4.8% by December 1998.

The combined effects of reduced interest rates, a low inflation environment, a pick-up in domestic demand as real wage rises and the beginning of the recovery in the housing market have all added to the positive outlook for the manufacturing industry over 1998.

The slow but steady lift in the overall business climate has also assisted the positive outlook for the manufacturing sector in Victoria and nationally over 1998 even in the light of recent downward movements in share prices and currencies in South East Asia. The countries mainly affected by these negative movements are the developing countries of Thailand, Indonesia, Malaysia, and the Philippines. For Australia this downturn will result in falling exports dampening production and growth trends for Australia and the manufacturing sector over 1998.

A further hindrance which manufacturing and the Australian economy still faces is weak consumer confidence in terms of job security which is continuing to dampen consumer demand and growth.

ANNUAL TREND CHANGES IN GROSS DOMESTIC PRODUCT AND MANUFACTURING PRODUCTION, AUSTRALIA(a)



(a) From September 1997 figures are forecasts. (b) Gross State Product.

Individual manufacturing sectors

The improvement in manufacturing activity over 1998 should benefit all sectors. However, an upward cycle in one sector does not necessarily flow to all sectors or within sectors. For example, the textile, clothing and footwear sector has seen some growth over the latter part of 1996 and into 1997, however, the sectors have also experienced sizeable downturns in the production of particular goods such as women's and men's shirts and blouses over the same period.

Victorian manufacturing is characterised by several predominant sectors, including the machinery and equipment sector with a turnover of more than \$15.4 billion, the food, beverages and tobacco industry with annual turnover in excess of \$12.8 billion and the petroleum, coal, chemical and associated products sector with an annual turnover of more than \$10.5 billion.

The big improvers over 1998 will be the wood, wood products and furniture and non-metallic minerals sectors, both lifting from the slump of activity in the building sector. Food, beverages and tobacco should also show modest gains as consumers increase their spending on these items, however, production in the food industry will continue to be dampened by the effects of El Niño over 1998. Given the size of this sector in Victoria this will be a serious concern.

**Manufacturing
input and
output prices**

The textiles and clothing and footwear sectors will remain weak, with further reductions in tariffs and a rationalisation of the domestic industry. These sectors will also face increased import competition over 1998.

Manufacturing production in the chemical, petroleum and coal products sector is forecast to show only modest growth over 1998. The machinery and equipment sector remained weak and eased over 1997 but is forecast to show a lift in production growth over 1998.

The transport equipment sector should continue to improve through 1998 given the forecast growth in the economy and the increasing pace of export activity for the sector. The basic metals and fabricated metal products sectors can expect modest improvement over 1998, but this will be delayed until general manufacturing conditions and the overall economy improve. Similarly, the forecast lift in the paper, printing and publishing sector is expected to be moderate.

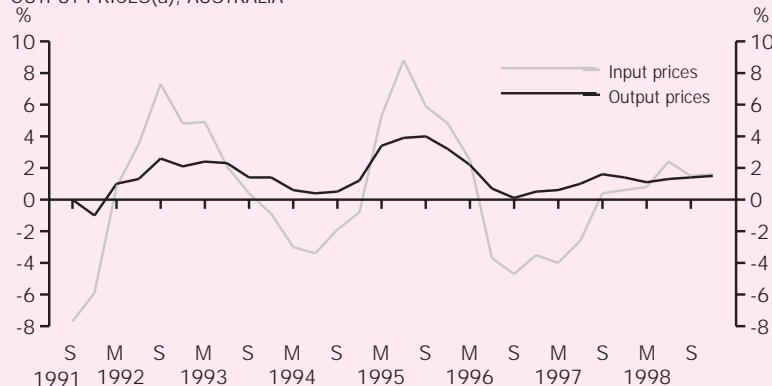
Throughout the latter part of 1995 and into 1996 selling prices for manufactured goods fell sharply (see chart below) as a direct result of the downturn in manufacturing demand. For example in the June 1996 quarter, manufacturers' selling prices fell by 0.3% as manufacturers attempted to maintain their market share and move existing stock through cutting margins and reducing selling prices. This was especially so for Victoria over the 1996 calendar year.

Over the same period, the input costs of raw materials for production fell sharply with a fall of 2.3% and 1.9% over the June 1996 and September 1996 quarters respectively. Regardless of these significant falls in the cost of raw materials, manufacturing profits continued to decline over the period due to weak demand.

Over 1997 raw material costs have again increased with this forecast to continue well into 1998 (see chart on next page). Raw material costs are forecast to grow 1.5% and 1.6% for the September and December 1998 quarters respectively as a result of increasing output prices for second tier producers.

The ACM Survey of Australian Manufacturing forecasts that manufacturers will no longer be able to continue to cut margins but rather will be forced to pass on any cost increases through to consumers. As such, the ACM expects overall inflation to begin to rise over 1998 as the prices of manufactured goods increase.

EXPECTED ANNUAL PERCENTAGE MOVEMENTS IN MANUFACTURING INPUT AND OUTPUT PRICES(a), AUSTRALIA

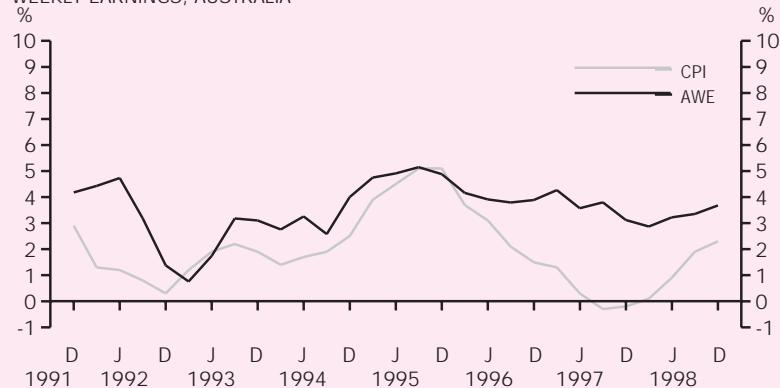


(a) From December 1997 figures are forecasts.

CPI movements and wages

The CPI in Australia has been falling steadily since March 1996 to a low of -0.3% for the year in September 1997 (see chart below). By the December 1998 quarter cost and demand pressures will see the CPI rise to around 2.3%. In Victoria, the same trend has been present, falling from 5.8% in December 1995 to -0.1 for September 1997. However, as activity picks up so too will cost and wage pressures, causing an increase in the Victorian CPI over 1998.

EXPECTED ANNUAL MOVEMENTS IN THE CONSUMER PRICE INDEX AND AVERAGE WEEKLY EARNINGS, AUSTRALIA



Since the March 1996 quarter, ordinary time average weekly earnings have also eased, but not to the same extent as the fall in the CPI, leading to growth in real wages and spending power for consumers. Traditionally, real wage increases have been a trigger for a lift in domestic demand and economic activity and is further boosted through a low interest rate environment.

Capacity utilisation and new investment

Currently, low consumer sentiment regarding job security is holding back growth in the economy by dampening demand, however, as the economy lifts over 1998, we can expect to see both consumer expectations and sentiment also improving. The forecast for average weekly ordinary time earnings for the December 1998 quarter is between 3.6% to 3.7%.

Enterprise bargaining agreements in manufacturing over 1997 have been running at around 4.3%, and as such, are continuing to lift real wages growth in this low CPI increase environment. In addition, enterprise bargaining has also led to some substantial lifts in productivity within the manufacturing industry, which is improving efficiency but at the cost of minimal, if any, significant rises in employment.

Historically, movements in new capital expenditure are generally very closely aligned to changes in capacity utilisation within the industry.

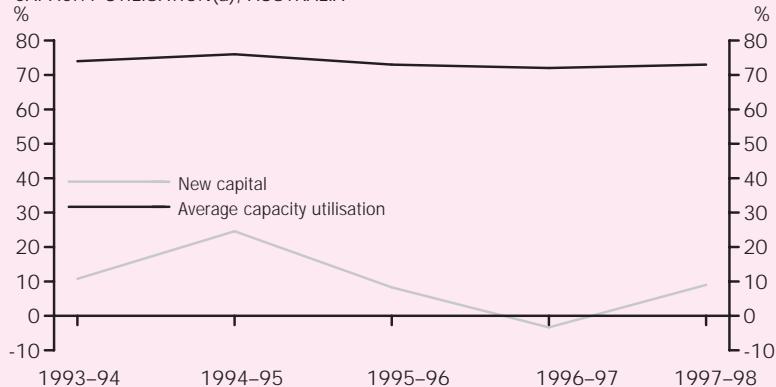
After a period of strong manufacturing investment over the 1994-95 financial year (22%), investment by manufacturers has eased considerably to an average of 8.3% over 1995-96 and falling to negative 3.4% over 1996-97.

Changes in the rate of average capacity utilisation also followed this downward trend, falling from 76% over 1994-95 to 72% in 1996-97.

The ACM Survey of Australian Manufacturing indicates that investment trends in 1997-98 will remain weak but improve in the critical sectors of food; textiles; paper, printing and publishing; basic metal products and the chemicals, petroleum and coal products sector. Investment will also continue to lift in the high technology sectors of machinery and equipment; and transport again promoting growth in the Victorian economy over 1998.

As forecast, the pace of manufacturing investment is likely to lift over 1997-98 to around 8% (see chart). However, this lift will be dampened through excess capacity in the manufacturing sector from the peak in investment in 1994-95, and labour productivity also lifting in response to the shift by many firms to enterprise bargaining agreements, many investment decisions will be held off until the later half of 1998.

EXPECTED MOVEMENTS IN MANUFACTURING INVESTMENT AND AVERAGE CAPACITY UTILISATION(a), AUSTRALIA



(a) 1997-98 figure is a forecast.

Manufacturing stocks and employment

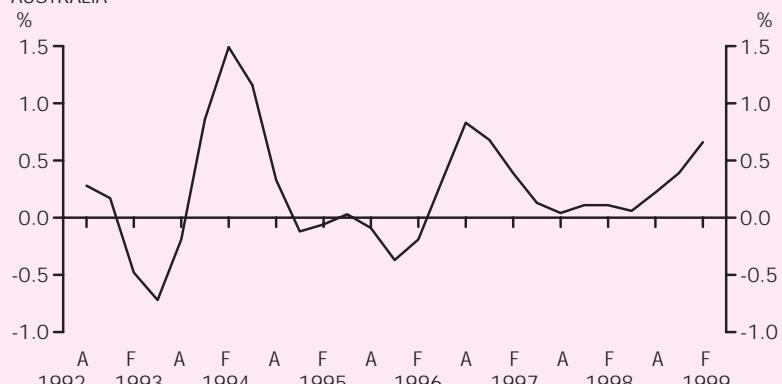
Manufacturing employment remained weak over 1995 both nationally and in Victoria then lifted in response to the expected increase in production in late 1996 and early 1997. Traditionally, manufacturers will increase overtime hours and part-time employees to accommodate lifts in production before any decision will be made to increase full time employment levels.

Stock levels are also a strong indicator and guide to forecasting growth and employment, especially in the manufacturing industry. However, it takes manufacturers several quarters to adjust production to accommodate either increasing or decreasing demand which result in adjustments to stock levels, with a stock decline indicating to many manufacturers that better times are ahead.

In 1993 strong national economic activity led to falling stock levels, and indicated to manufacturers that they should lift production to accommodate increasing demand. However, as we now know, sales fell away following this period and as such, stock levels again rose as manufacturers took some time to again reduce production levels.

Through 1996 there was a major buildup of stock levels within manufacturing. This build up meant that manufacturers, rather than increasing production during the lift in activity over latter part of 1996, chose to lower stock levels instead. The ACM Survey of Australian Manufacturing suggests that this has been a major factor inhibiting the growth in manufacturing production and employment. Employment is forecast to remain weak over 1998 but will strengthen over the latter part of 1998.

EXPECTED QUARTERLY MOVEMENTS IN MANUFACTURING EMPLOYMENT(a),
AUSTRALIA



(a) From November 1997 figures are forecasts.

Company profits

Manufacturing profits eased considerably in the latter part of 1995 and into 1996 following a strong period of growth in early 1994 (see chart on next page). Manufacturing profits lifted in the September and December 1996 quarters following significant falls in input costs and a lift in manufacturing demand. However, company profits in the manufacturing industry again eased following the downturn in manufacturing demand over the early part of 1997.

Overall, company profits are forecast to increase over 1998 (see chart below) based on improved manufacturing demand and production, increasing profit margins and increased productivity. Nevertheless, the manufacturing sector is still likely to under perform in terms of profits relative to other sectors of the economy as they rebuild following several weak years.

EXPECTED QUARTERLY MOVEMENTS IN MANUFACTURING NET PROFITS(a),
AUSTRALIA



(a) From September 1997 figures are forecasts.

Manufactured exports

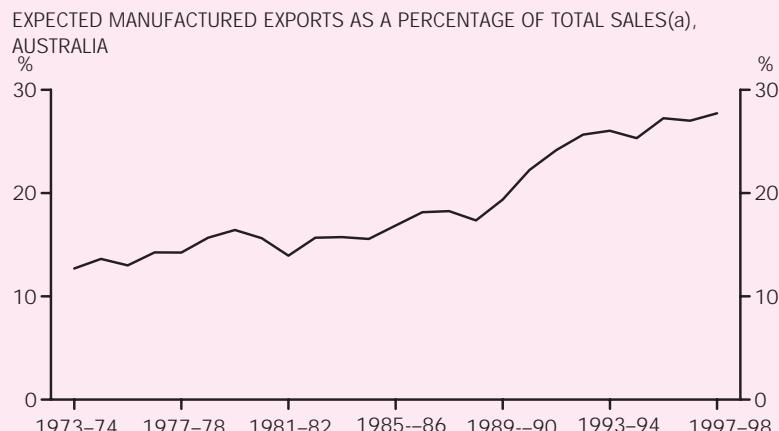
Exports are a vital component of Australia's manufacturing industry (see chart on next page) and accounts for over \$16 billion of trade in Victoria. The proportion of national manufacturing production which is exported has risen from 15.6% in 1990 to 27.3% in 1996.

However, in recent years the rate of export growth for Australia has slowed to become negative for manufactured goods in the latter part of 1996 and into 1997 but has again been rising to around 8% in the June 1996 quarter.

Australian exports are very reactive to movements of the Australian dollar. In 1998, the annual growth in manufactured exports is expected to between 7% to 9%.

Industry sectors anticipating relatively strong export growth during 1998 and beyond include: chemicals, petroleum and coal products; basic metal products; transport equipment and other machinery and equipment. These sectors are strongly represented in Victorian manufacturing and should also be assisted through the forecast weak Australian dollar over 1998.

Slower growth is anticipated in the clothing and footwear; paper products, printing and publishing with the production in the food, beverages and tobacco sectors being dampened further through the effects of El Nino on production.



(a) From 1996-97 figures are forecasts.

The weakening of the Asian economies will dampen forecasts for Australian exports over 1998 with the extent of this fall depending on the degree that North Asia is effected by the fall. However, China, Malaysia and Indonesia will still be key new markets for manufacturing firms who are seeking new export markets. For firms not currently exporting, the United States, New Zealand and Japan, will continue to offer opportunities for Australian manufacturers.

Victorian manufacturing outlook

Overall, 1998 is forecast to be a positive growth period for Victorian manufacturing following the slide in production over 1996.

In an environment of increased real wages, low interest rates, low inflation and rising overtime and employment, we can expect to see significant increases in demand and production for Victorian and Australian manufacturers. This improving trend will strengthen towards the latter part of 1998 with growth in the Victorian manufacturing sector forecast to be in the 4.6% to 4.8% range by the December quarter 1998.

The sectors which will be anticipating export growth over 1998, including the machinery and equipment and the chemicals sector will place Victorian manufacturing in a prime position to take advantage of these opportunities.



Photo:

Oil refinery

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Source: Economic Services, The Australian Chamber of Manufactures.

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Australian Dairy Corporation

Australian Chamber of Manufactures

Chapter 14

Primary Industries

Photo:

Mt. Elephant

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OVERVIEW

This chapter contains information on Victoria's primary industries. Topics covered include agriculture, fishing, forestry and mining.

The majority of agricultural data in the chapter are derived from the annual Agricultural Census. Readers should be aware that the 1995–96, 1994–95 and 1993–94 Agricultural Censuses included those establishments with an Estimated Value of Agricultural Operations (EVAO) of \$5,000 or more. In both 1991–92 and 1992–93 the scope of the census was those establishments undertaking agricultural activity having an EVAO of \$22,500 or more. Consequently this change in the scope of the census means that care should be taken when comparing 1993–94 to 1995–96 census results with the results of previous censuses.

AGRICULTURE

The 1995–96 Agricultural Census included just under 37,000 establishments with agricultural activity. The 1995–96 season was not affected by drought in contrast to 1994–95, causing an increase in the production of cereals and legumes grown for grain and fodder crops. The dairy industry continued to make gains in production, and meat cattle numbers increased marginally. Sheep numbers were up. Overall, fruit and vegetable production was generally up on the previous season.

The gross value of all crops increased by 56% to \$2.76 billion. This was mainly as a result of the increase in the gross value of cereals for grain, which rose by almost 145% to \$903 million as a result of the more favourable weather conditions.

The total gross value of agricultural commodities produced was \$6.39 billion, a 24% increase compared with the previous season.

Victoria compared with Australia

In terms of farm income, as measured in the Australian National Accounts, Victoria's share for the latest 6 year period (1990–91 to 1995–96) fluctuated markedly. The 1995–96 Victorian figure was \$1,816 million, which represented 33.4% of the total Australian farm income of \$5,441 million.

The Gross Value of Agricultural Commodities Produced (GVACP) provides a measure of the output from farming. In 1995–96, the GVACP for Victoria was \$6,389 million, or 23% of the Australian total of \$27,370 million. In terms of value, Victoria produced 18% of Australia's crops, 22% of livestock slaughtered and 39% of livestock products (wool, milk, eggs, and honey).

14.1 AUSTRALIAN NATIONAL ACCOUNTS: FARM INCOME

Year	Victoria \$m	Australia \$m	Victoria as a percentage of Australia %
1991–92r	1 011	1 935	52.2
1992–93r	1 220	3 134	38.9
1993–94r	1 429	3 710	38.5
1994–95r	806	2 025	39.8
1995–96	1 816	5 441	33.4

Source: Australian National Accounts: State Accounts (5220.0).

14.2 GROSS VALUE OF AGRICULTURAL COMMODITIES PRODUCED, VICTORIA

Particulars	Year ended 30 June						Victoria as a percentage of Australia 1996 %
	1991 \$'000	1992 \$'000	1993 \$'000	1994 \$'000	1995 \$'000	1996 \$'000	
Crops							
Cereals for grain	343 967	413 010	600 975	593 056	368 928	902 807	14
Hay	287 937	285 127	263 850	228 734	261 689	371 305	43
Industrial crops(a)	42 031	41 292	47 598	62 530	44 689	77 393	26
Vegetables	320 528	314 933	316 239	413 213	385 090	405 398	25
Grapes	158 598	178 620	155 721	175 568	144 516	227 880	32
Fruit	244 160	334 263	342 669	344 563	324 959	344 391	23
Other	211 270	265 893	384 009	355 231	240 720	435 717	11
Total	1 608 591	1 834 131	2 111 061	2 172 895	1 770 592	2 764 891	18
Livestock slaughterings and other disposals							
Cattle and calves	794 469	743 455	678 886	830 553	775 794	693 957	19
Sheep and lambs	112 914	146 071	203 312	243 602	263 402	324 521	31
Other	363 327	392 961	389 325	411 682	336 233	352 082	23
Total	1 270 711	1 282 487	1 271 523	1 485 837	1 375 429	1 370 560	22
Livestock products							
Wool	707 796	552 141	413 178	439 771	633 714	482 699	19
Dairy products	1 000 565	1 080 903	1 332 455	1 381 149	1 313 269	1 712 393	57
Other	95 507	72 468	79 267	56 868	54 383	58 405	19
Total	1 803 870	1 705 510	1 824 900	1 877 788	2 001 366	2 253 492	39
Grand total	4 683 172	4 822 131	5 207 484	5 536 522	5 147 387	6 388 943	23

(a) Industrial crops for the period 1990–1994 refers to tobacco, hops, linseed, canola, safflower and sunflower. Linseed production data was not collected by the ABS in 1995 and 1996.

Source: *Value of Agricultural Commodities Produced, Australia (7503.0)*.

14.3 NUMBER OF ESTABLISHMENTS, WITH AGRICULTURAL ACTIVITY, AREA, AND LAND UTILISATION BY STATISTICAL DIVISION 1995–96

Statistical division	Number of establishments(a) ha	Area used for crops(b) ha	Area of horticulture ha	Sown pasture and lucerne ha	Native pasture ha	Total area of establishments '000 ha
Melbourne	2 743	5 912	17 422	119 763	34 795	224
Barwon	2 027	31 298	2 465	292 585	79 859	507
Western District	5 148	50 952	1 142	1 140 261	210 069	1 749
Central Highlands	1 957	67 253	4 637	373 514	82 887	739
Wimmera	3 171	887 764	1 372	679 894	143 225	2 292
Mallee	4 499	958 958	29 098	456 585	138 759	2 576
Loddon-Campaspe	2 315	169 232	1 754	422 357	112 212	966
Goulburn	6 559	150 031	14 701	782 210	209 125	1 568
Ovens-Murray	2 330	17 965	2 932	272 510	85 999	663
East Gippsland	2 534	6 462	3 841	372 477	121 666	1 023
Gippsland	3 622	4 596	5 673	325 284	82 962	462
Total Victoria	36 905	2 350 422	85 035	5 237 439	1 301 558	12 768

(a) Includes non land-based beekeeping establishments (i.e. beekeeping activity not permanently located at one site). (b) Duplicated area included if double-cropping occurred.

Source: *AgStats on Floppy Disk (7117.0)*.

Wheat

Wheat is still Victoria's largest crop in terms of area and production. In 1995–96 the area sown increased almost 4% to 853,000 hectares; however as a result of favourable conditions production recovered to 1,921,000 tonnes. Of the major cereals for grain, wheat accounted for 56% of the total production, with a gross value of \$504 million.

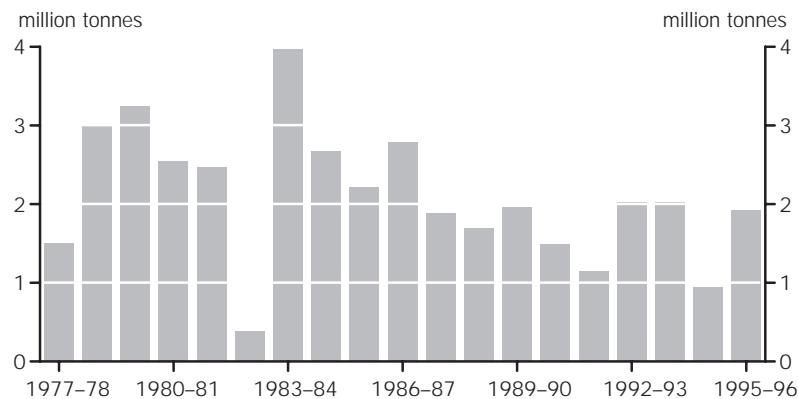
14.4 WHEAT FOR GRAIN, VICTORIA

Season	Area '000 ha	Production '000 tonnes	Average yield per hectare tonnes	A.S.W.(a) wheat standard kg/ha
1991-92	664	1 150	1.7	83.0
1992-93	821	2 015	2.5	79.5
1993-94	780	2 022	2.6	80.0
1994-95	822	944	1.1	84.5
1995-96	853	1 921	2.3	85.5

(a) Australian Standard White, quoted in kilograms per hectolitre, which is a measure of density.

Source: *AgStats on Floppy Disk (7117.0)*; *Australian Wheat Board*.

WHEAT PRODUCTION, VICTORIA, YEAR ENDED 31 MARCH



Source: *AgStats on floppy disk (Cat. no. 7117.0)*; *Australian Wheat Board*.

Oats

Oats are sown for grain production, winter grazing, and hay production. Of the total area sown, about 74% was harvested for grain, some of it having been grazed during the winter.

A significant portion of the total production of oats is held on farms for future use, with the balance being used for compound/urban feed markets, for milling, and for export.

14.5 OATS FOR GRAIN, VICTORIA

Season	Area '000 ha	Production '000 tonnes	Average yield per hectare tonnes
1991-92	183	300	1.64
1992-93	223	404	1.81
1993-94	186	362	1.95
1994-95	148	201	1.36
1995-96	187	392	2.10

Source: *AgStats on Floppy Disk (7117.0)*.

Barley

As a result of more favourable conditions, the area sown to barley recovered in 1995-96. While barley is grown throughout the State, production has been traditionally centred in two distinct areas where high quality grain is produced. The highest production is in the south-west of the Mallee Statistical Division and the adjacent north-western Wimmera Statistical Division. The second source of high quality barley grain is in an area between Melbourne, Geelong, and Bacchus Marsh in southern Victoria.

14.6 BARLEY FOR GRAIN, VICTORIA

Season	Area '000 ha	Production '000 tonnes	Average yield per hectare tonnes
1991-92	534	898	1.68
1992-93	551	1 116	2.03
1993-94	639	1 386	2.17
1994-95	492	448	0.91
1995-96	628	1 342	2.14

Source: AgStats on Floppy Disk (7117.0).

Other Cereal Crops

Other cereal crops are rye, maize, millet and triticale (a wheat/rye hybrid). Production and area planted for them all is small compared to major cereal crops of wheat, oats and barley. Maize and triticale have shown a steady growth in the area given over to these grains. Triticale is a recent introduction to agriculture.

14.7 OTHER CEREAL CROPS FOR GRAIN

Season	Rye		Maize		Millet		Triticale	
	Area '000 ha	Production '000 tonnes						
1991-92	19.0	17.1	0.3	3.0	0.9	1.7	18.9	34.6
1992-93	18.7	16.3	0.4	2.8	0.8	1.6	22.6	50.0
1993-94	12.5	14.2	0.2	1.7	1.4	2.1	32.4	70.7
1994-95	n.a.	n.a.	0.7	5.1	1.7	2.6	47.0	66.2
1995-96	n.a.	n.a.	1.1	6.8	1.0	1.8	54.8	120.5

Source: AgStats on Floppy Disk (7117.0).

Hay

Hay is an important farm resource. It can be stored for later use as fodder when normal feed is deficient or needs supplementing. It can therefore be used to overcome seasonal fluctuations in fodder availability or periods of drought. It can also be easily transported to drought affected areas from areas unaffected. The majority of hay is produced from pasture.

Photo:

Blampied near Daylesford (two men in front of haystack)

Delete keylines

14.8 HAY PRODUCTION, VICTORIA, SEASON 1995-96

Variety	Area ha	Production '000 tonnes	Average yield per hectare tonnes
Pastures (excluding lucerne)	511.9	1 970.9	3.9
Oaten	65.8	273.0	4.2
Lucerne	48.9	237.9	4.9
Cereals (excluding oats)	9.0	27.9	3.1
Total	649.6	2 562.9	3.9

Source: *AgStats on Floppy Disk (7117.0)*.

Oilseeds

The more favourable conditions experienced during 1995-96 also had a beneficial effect upon oilseed production. The area sown to canola (rapeseed), increased by only 2% (as compared with a 155% between 1993-94 and 1994-95). However, production increased from 57,000 tonnes to 120,000 tonnes, the average yield per hectare increasing from 0.76 tonnes to 1.57 tonnes, reflecting the improved weather conditions. The area sown and the production of both safflower and sunflower showed significant increases.

14.9 SELECTED OILSEEDS PRODUCTION, VICTORIA

Season	Linseed		Canola(a)		Safflower		Sunflower	
	Area ha	Production tonnes	Area ha	Production tonnes	Area ha	Production tonnes	Area ha	Production tonnes
1991-92	1 287	1 251	22 957	26 481	19 707	12 116	1 396	2 222
1992-93	1 073	1 045	18 459	23 543	15 376	12 347	1 157	1 828
1993-94	3 004	3 258	29 151	46 835	29 358	24 404	2 425	3 720
1994-95	n.a.	n.a.	74 467	56 728	17 708	8 223	880	1 523
1995-96	n.a.	n.a.	76 227	119 556	25 123	17 145	1 600	2 159

(a) Rapeseed.

Source: *AgStats on Floppy Disk (7117.0)*.

Grain legumes

The area of lupins sown fell by almost 22% to 50,500 hectares in 1995-96. However the production of lupins increased by 170% to 62,000 tonnes. The production of field peas experienced an even greater increase of 277% to 260,000 tonnes despite a 23% fall in the area sown.

14.10 LEGUMES FOR GRAIN, VICTORIA

Season	Lupins		Field peas	
	Area '000 ha	Production '000 tonnes	Area '000 ha	Production '000 tonnes
1991-92	36.7	40.5	193.6	211.7
1992-93	52.6	82.5	174.2	246.2
1993-94	55.1	59.5	199.9	292.5
1994-95	64.4	23.0	223.2	68.9
1995-96	50.5	62.0	171.9	260.0

Source: *AgStats on Floppy Disk (7117.0)*.

Orchard fruit and nuts

In Victoria the area planted with fruit, nuts and berries in 1995-96 was 24,601 hectares, and the area of vineyards was 23,103 hectares. Although the total represented less than 2% of the total area under crops, fruit and grapes contributed almost 21% of the gross value of crops produced.

The main fruit growing areas are in the Goulburn, Mallee, and Melbourne Statistical Divisions. There are other important, but smaller areas throughout the State, including areas in the Ovens-Murray, Wimmera and Loddon Statistical Divisions.

Apple production is still the most significant fruit grown in Victoria, despite a 20% decrease on the previous season with a gross value of production of \$98.0 million. Peaches, oranges and pears are the next most important orchard fruit grown. The total gross value of production of orchard fruit, including nuts, was \$328.0 million.

A wide range of nuts can be grown in Victoria. Examples are almonds, walnuts, chestnuts, hazelnuts, and pistachios. In the past only a few of these trees have been grown in commercial plantings and nut growing is still not a major activity. Almonds are the most significant of nuts grown in Victoria, production in 1995–96 increased by almost 4% to 2,907 tonnes. Almonds were mainly planted in the northern area; walnuts and chestnuts in situations with deep soil in the north-east, the Dandenongs and Gippsland; and hazelnuts on shallower soils in the north-east and the Dandenongs.

14.11 ORCHARD FRUIT AND NUT PRODUCTION, VICTORIA

Type of fruit	Year ended 31 March				
	1992 tonnes	1993 tonnes	1994 tonnes	1995 tonnes	1996 tonnes
Pears	158 394	146 145	138 967	138 696	141 275
Apples	105 725	109 488	94 657	98 971	78 988
Peaches	35 758	36 787	33 875	34 354	36 354
Apricots	10 421	10 203	5 976	10 649	7 026
Cherries	1 736	1 525	1 943	2 391	2 353
Plums and prunes	4 414	4 235	4 500	4 312	3 756
Olives	352	356	410	n.a.	n.a.
Nectarines	4 537	5 618	6 126	6 175	6 919
Oranges	68 507	97 747	92 369	84 253	72 358
Lemons and limes	5 846	6 206	5 913	6 088	4 849
Grapefruit	6 647	5 932	5 570	n.a.	n.a.
Mandarins	3 781	4 211	4 643	3 830	4 963
Almonds	2 454	2 411	2 898	2 805	2 907

(a) The production of oranges in 1994–95 totalled 84,253 tonnes. Varieties were not collected.

Source: *AgStats on Floppy Disk* (7117.0).

Small fruit

Climatic requirements have restricted the commercial production of strawberries, and cane and bramble fruits in particular, to the cooler southern regions of Victoria; consequently most of this fruit is grown in the Dandenong Ranges and the Mornington Peninsula areas, which are relatively close to the Melbourne markets. In recent years, fruit growers in other parts of the State have diversified into strawberries, raspberries and kiwi fruit, particularly for the fresh fruit market.

14.12 SMALL FRUIT PRODUCTION, VICTORIA

Type of fruit	Year ended 31 March				
	1992 tonnes	1993 tonnes	1994 tonnes	1995 tonnes	1996 tonnes
Strawberries	1 976	2 333	3 145	2 921	3 279
Raspberries	279	341	266	224	220
Kiwi Fruit	2 380	2 317	2 593	2 731	2 063
Blueberries	107	131	131	n.a.	n.a.

Source: *AgStats on Floppy Disk* (7117.0).

Grapes

Grape growing, particularly for wine making, is extensive throughout Victoria. The Mallee Statistical Division is the principle grape growing region, with most vines being grown under irrigation. Ovens-Murray and Goulburn Statistical Divisions are also major grape growing regions—irrigation is used extensively in both areas. The increasing interest in wine grapes over recent years has resulted in the establishment of many vineyards of varying sizes throughout the State.

Grape production increased by 54% to 427,002 tonnes with a gross value of production of \$228 million, or 32% of the Australian gross value of \$714 million.

14.13 VITICULTURE, AREA AND PRODUCTION, VICTORIA

Season	Bearing ha	Non-bearing ha	Wine making tonnes	Drying and table(a) tonnes
1991-92	18 490	981	104 398	294 514
1992-93	19 049	1 014	118 452	192 448
1993-94	19 535	1 511	167 083	192 150
1994-95	18 989	2 603	137 613	139 822
1995-96	19 834	3 270	199 325	227 677

(a) Production for drying is estimated as fresh weight equivalent of dried weight.

Source: *AgStats on Floppy Disk* (7117.0).

14.14 AREA OF GRAPEVINES AND PRODUCTION BY VARIETY, VICTORIA, 1995-96

Variety	Area planted			Average yield(a) tonnes/ha
	Not yet bearing ha	Bearing ha	Production tonnes	
Red grapes				
Cabernet Franc	3	91	888	9.8
Cabernet Sauvignon	251	891	9 061	10.2
Currant (including Carina)	51	514	10 985	21.4
Frontignanc Red	1	100	512	5.1
Grenache	7	78	1 131	14.5
Merlot	70	159	1 707	10.7
Muscat Hamburgh	26	81	627	7.7
Pinot Noir	128	377	2 897	7.7
Shiraz	466	775	7 437	9.6
Ruby Cabernet	38	91	2 008	22.1
Other red grapes	113	1 044	12 896	12.4
Total red grapes	1 153	4 200	50 149	11.9
White grapes				
Chardonnay	1 268	1 765	22 216	12.6
Chenin Blanc	9	120	3 003	25.0
Colombard	31	257	7 787	30.3
Doradilo	0	45	1 816	40.4
Muscat Gordo Blanco	77	937	23 322	24.9
Riesling	11	357	5 029	14.1
Sauvignon Blanc	74	218	3 409	15.6
Semillon	232	79	924	11.7
Sultana	327	10 680	293 185	27.5
Traminer	0	38	546	14.4
Waltham Cross	9	394	6 486	16.5
Other white grapes	80	743	9 131	12.3
Total white grapes	2 117	15 633	376 854	24.1
Total	3 270	19 834	427 002	21.5

(a) Yield is production per hectare of bearing vines.

Source: *Agstats on Floppy Disk* (7117.0).

Wine exports

Exports of Victorian sparkling and table wines amounted to over \$85 million in 1996-97. The major importer of Victorian wine in 1995-96 was the United States of America which took \$12.1 million of white table wine and \$16.5 million of red table wine. The corresponding figures for the United Kingdom were \$8.8 million and \$9.7 million respectively.

14.15 EXPORTS OF SPARKLING AND TABLE WINES, VICTORIA

	Quantity		Value (FOB)	
	1995-96 '000 litres	1996-97 '000 litres	1995-96 \$'000	1996-97 \$'000
White table wine	4 361	5 737	23 353	31 620
Red table wine	5 449	7 032	36 248	49 229
Table rose	8	11	26	19
Sparkling wine	461	287	4 220	2 575
Fortified wine	139	106	840	828
Other wine	82	150	792	1 319
Vermouth and other flavoured wine	59	963	3	20
Total	10 599	13 325	66 443	85 610

Source: ABS unpublished data.

Vegetables

Most of the fresh vegetable production in Victoria is located in the Melbourne, Central Highlands, Gippsland, East Gippsland and Goulburn Statistical Divisions.

Potatoes, the most significant vegetable produced, are grown mainly in the Melbourne (at Toolangi and Koo-wee-rup), Central Highlands (around Ballarat), and Gippsland (Thopdale) Statistical Divisions, with additional areas around Warrnambool, the Bellarine Peninsula, Colac, and the Otway Ranges. The gross value of production of potatoes in 1995-96 was \$114 million. The total gross value of production of vegetables was \$405 million, which was up 5% on the previous year.

The tomato industry in Victoria is predominantly processing-oriented with most of the crop produced in the irrigated areas between Shepparton and Rochester in northern Victoria. Total production of tomatoes in 1995-96 was 171,805 tonnes, and was valued at \$22 million.

14.16 VEGETABLES FOR HUMAN CONSUMPTION, VICTORIA

Type of vegetable	Area sown			Production		
	1993-94 ha	1994-95 ha	1995-96 ha	1993-94 tonnes	1994-95 tonnes	1995-96 tonnes
Potatoes	12 005	10 135	11 457	322 147	279 876	355 649
Onions	545	512	545	16 200	15 427	17 604
Carrots	1 938	2 253	2 736	66 460	74 637	91 123
Parsnips	197	238	284	3 388	3 843	6 708
Beetroot	72	75	66	803	879	824
Tomatoes	2 740	2 812	2 991	120 396	139 541	171 805
French beans	504	655	672	2 188	2 575	2 220
Green peas	281	293	181	613	699	407
Cabbages	726	750	864	26 548	27 875	30 603
Cauliflowers	1 280	1 264	1 249	28 573	19 638	20 780
Lettuce	1 632	1 639	2 071	35 041	34 155	45 785
Pumpkins	379	394	375	5 975	6 271	5 774

Source: AgStats on Floppy Disk (7117.0).

Tobacco

The tobacco industry in Victoria is centred at Myrtleford in the Ovens-Murray Statistical Division, with production areas in the adjacent valleys of the Buffalo, Ovens, King, and Kiewa Rivers. In 1995-96, the total number of tobacco growers in Victoria decreased from 121 to 113. The total production was 3,214 tonnes (dried weight), with a gross value of production of \$19 million.

14.17 TOBACCO PRODUCTION, VICTORIA

Season	Area ha	Production tonnes (dry)	Average yield per hectare tonnes (dry)
1991-92	1 845	4 219	2.29
1992-93	1 983	4 738	2.39
1993-94	1 357	4 128	3.04
1994-95	1 357	2 893	2.13
1995-96	1 421	3 214	2.26

Source: *AgStats on Floppy Disk (7117.0)*.

Hops

In Victoria production of hops is confined to the alluvial soils in the valleys of the Ovens and King Rivers where good quality irrigation water is available to supplement the natural summer rainfall. In 1995-96 the 12 hop gardens in Victoria produced 688 tonnes (dried weight) of hops for both domestic brewers and the export market. The gross value of production was \$3.3 million.

14.18 HOP PRODUCTION, VICTORIA

Season	Area ha	Production (dried weight) tonnes	Average yield per hectare tonnes
1991-92	352	764	2.17
1992-93	335	566	1.69
1993-94	356	643	1.81
1994-95	319	644	2.02
1995-96	307	688	2.24

Source: *AgStats on Floppy Disk (7117.0)*.

Livestock

Sheep numbers, including lambs, increased by almost 3% to 22.0 million head in 1995-96. The number of sheep slaughtered decreased by almost 23%, whilst the number of lambs slaughtered was down by over 6%. The number of live sheep exported from Victorian ports was 634,211 with a value free on board (FOB) of \$23.7 million. Numbers of cattle and pigs have remained relatively steady as have the numbers slaughtered.

14.19 SELECTED LIVESTOCK NUMBERS, VICTORIA

Season	Cattle			Sheep '000	Pigs '000
	Dairy '000	Beef '000	Total '000		
1991-92	1 422	2 152	3 574	24 782	431
1992-93	1 463	2 226	3 689	23 552	423
1993-94	1 585	2 604	4 189	23 439	460
1994-95	1 622	2 663	4 285	21 361	439
1995-96	1 682	2 714	4 396	21 974	458

Source: *AgStats on Floppy Disk (7117.0)*.

14.20 LIVESTOCK SLAUGHTERED, VICTORIA

Types of livestock	1991-92 '000	1992-93 '000	1993-94 '000	1994-95 '000	1995-96 '000
Sheep	4 154	3 723	3 976	3 230	2 488
Lambs	6 321	6 288	5 601	6 303	5 898
Cattle and calves	2 226	1 974	1 977	2 103	2 113
Pigs	1 211	1 071	1 189	1 197	1 142

Source: *Livestock Products, Australia (7215.0)*.

Sheep and wool

At 31 March 1996 the Victorian sheep population was 22 million head, well below the 1971 peak of 34 million head. Sheep numbers are widely distributed throughout the State. The Western District Statistical Division holds 30% of the States sheep flock. The other significant Statistical Divisions are Wimmera (16%) and Central Highlands (15%). Total wool production in 1995–96 decreased by 7.0% to 129,000 tonnes, with a gross value of \$483 million.

Photo:

Summit Park near Hamilton (with sheep)

Delete keylines

14.21 SHEEP AND LAMBS BY STATISTICAL DIVISION, AT 31 MARCH 1996

Statistical division	Sheep(a) '000	Lambs and hoggets '000	Total '000
Melbourne	121	25	146
Barwon	1 173	343	1 515
Western District	5 049	1 490	6 539
Central Highlands	2 517	699	3 216
Wimmera	2 694	772	3 467
Mallee	941	312	1 253
Loddon-Campaspe	1 514	441	1 955
Goulburn	1 831	419	2 250
Ovens-Murray	304	67	371
East Gippsland	799	211	1 009
Gippsland	196	56	253
Total Victoria	17 138	4 836	21 974

(a) Includes rams, ewes and wethers.

Source: *AgStats on Floppy Disk* (7117.0).

14.22 TOTAL WOOL PRODUCTION, VICTORIA

Season	Clip tonnes	Stripped from or exported on skins (greasy) tonnes	Total quantity (greasy) tonnes
1991–92	116 574	28 791	145 365
1992–93	117 520	27 554	145 082
1993–94	110 035	14 500	124 535
1994–95	123 303	14 827	138 130
1995–96p	115 672	12 857	128 529

Source: *Value of Agricultural Commodities Produced, Australia* (7503.0).

Lambing

Victoria's largest lambing season occurred in 1970-71, when 12.7 million lambs were marked from 14.8 million ewes mated (86%). The peak in more recent years was in 1984-85 when 10.4 million lambs were marked from 11.7 million ewes mated (89%). In 1995-96, 8.5 million ewes were mated resulting in 7.0 million lambs marked; and a success rate of 83%, which is consistent with recent years.

14.23 LAMBING, VICTORIA

Season	Ewes mated '000	Lambs marked '000	Percentage of lambs marked to ewes mated %
1991-92	9 466	7 412	78
1992-93	9 352	7 592	81
1993-94	9 325	7 549	81
1994-95	9 029	7 318	81
1995-96	8 491	7 027	83

Source: *AgStats on Floppy Disk (7117.0)*.

Mutton and lamb production

Mutton, the meat from adult sheep, is mainly produced from sheep which are surplus to the wool industry; consequently production patterns correspond closely to expansions and contractions in that industry. In 1995-96, mutton production was 50,910 tonnes, down on the previous year's figure of 64,440 tonnes.

Prime lamb producers are found throughout the State. However, early to mid-season producers are distributed in a broad band across northern Victoria, including some irrigated areas. In addition, a considerable number of early lambs are brought from southern New South Wales for slaughter in Victoria. Mid to late-season producers are located mainly in the Western District, Central Highlands, Gippsland, and parts of the Ovens-Murray Statistical Divisions of the State. In 1995-96 there were 110,172 tonnes of lamb meat produced.

Meat cattle

The Victorian environment is very favourable for beef production with cattle able to graze on pasture throughout the year. The herd is spread throughout the State with the Western District, Goulburn, Ovens-Murray, East Gippsland and Gippsland Statistical Districts being the major regions. In 1995-96 there were 348,649 tonnes of beef and 12,009 tonnes of veal was produced.

14.24 DISTRIBUTION OF CATTLE AND PIGS BY STATISTICAL DIVISION AT 31 MARCH 1996

Statistical division	Meat cattle '000	Milk cattle(a) '000	Pigs '000
Melbourne	161	42	16
Barwon	136	117	19
Western District	590	372	17
Central Highlands	118	9	26
Wimmera	57	3	47
Mallee	101	93	72
Loddon-Campaspe	109	31	150
Goulburn	424	444	89
Ovens-Murray	317	62	2
East Gippsland	325	172	3
Gippsland	377	337	15
Total Victoria	2 714	1 682	458

(a) Excludes house cows.

Source: *AgStats on Floppy Disk (7117.0)*.

THE VICTORIAN DAIRY INDUSTRY

INTRODUCTION

Victoria is the largest producer of dairy products in Australia. In 1996–97, 62% of milk and about 85% of dairy exports came from Victoria and were valued at \$1.55 billion. The majority of exports are in the form of bulk commodities of skim milk powder, butter and cheese. Victoria's export success is due in large part to the low cost of milk production resulting in the industry being internationally competitive. Dairy products are the biggest component of the Victorian food industry.

Victoria has some comparative advantages in dairy farming over many other parts of the world. The temperate climate in this area enables the production of milk using pasture grown under natural rainfall in the south west, most of Gippsland and the river valleys of the North East or with relatively low priced irrigation water in the Murray, Goulburn and Macalister irrigation systems. This pasture based production system is further enhanced and complimented by the availability of cheap grain.

The typical Victorian dairy farm is a family operated and managed enterprise, milking about 150 cows on 80 to 100 hectares producing about 750,000 litres of milk per annum. The farm has a seasonally calving herd, calving down during June to September and each year raising about 30 replacement heifers on the farm. The majority of hay and silage is produced on the farm and each cow is fed about 0.8 tonnes of grain or pellets in the bail. Farm labour is primarily provided by the family who assist with the milking, calving down, calf raising, hay and silage making.

DEVELOPMENT

The development of the Victorian dairy industry began in 1834 when Edward Henty arrived at Portland with the first dairy cows. The south west had high rainfall and good soil and was suitable for successful farming. In the years until 1860, exploration was the key feature of agricultural development. Gippsland was explored and found to be a rich agricultural area and its unlocking began with the construction of stock routes after 1861. Gold mining had attracted immigrants to Victoria after 1851. Ten years later when the diggings had become less lucrative for many, interest in agriculture and the settlement of farms began in earnest. Between 1860 and 1880, land under cultivation in Victoria increased from 387,282 acres to 1,548,282 acres. While this included settlement in the north of the State, a less reliable water supply saw the most significant development in that area occur after the provision of irrigation, much of which appeared during the Depression of the 1930s.

The dairy industry of the 1800s had twenty years of exploration and twenty years of settlement, and the next twenty years was characterised by the development of technology, export markets and administrative and regulatory arrangements. Significant technological advances were the introduction of the centrifugal cream separator and refrigeration in the ten years between 1880 and 1890. During the 1890s State Governments appointed experts to advise farmers and encourage the export of butter to the United Kingdom. In 1888-9, 31 butter factories were registered and by 1895 there were 174 factories and 284 creameries. In the same five years, butter production increased by 253%. By 1900 a sound dairy industry had been established and the perishability of the product had been overcome by technology. Exports of butter to the United Kingdom began and remained our major export market until the early 1970s.

The amount of time taken to milk cows by hand and the availability of labour limited the size of dairy farms. Milking machines had been patented as early as 1836 but it was not until the late 1930s that there was broader adoption in Victoria due to the recovery from the Depression and distribution electricity to farms. Developments in milking technology, including capacity of machinery, refrigerated storage tanks and improved shed design have enabled huge changes in the size of farms. Table 14.25 shows the change in average herd size. Today there are farms milking as many as 1,200 cows through one rotary shed.

14.25 AVERAGE DAIRY HERD SIZE, VICTORIA

Year	No. cows per herd
1950	18
1960	24
1970	50
1980	91
1986	96
1990	110
1995	136
1996	142

Source: Australian Dairy Corporation.

The Second World War marked a change in the dairy industry. Government assistance promoted land development and irrigation schemes in Victoria's dairy regions and soldier settlement schemes were instituted for returned soldiers. By the 1950s Victoria was the dominant dairy manufacturing State and the industry had become a significant sector of the Victorian economy.

A critical period for the dairy industry was in 1973 when the United Kingdom joined the European Economic Community and access to European markets was cut. The industry had to find new markets and improve its international competitiveness. There was a significant rationalisation in the industry (note the large drop in numbers of farms between 1970 and 1975 shown in table 14.26). There was also a major change in the product mix over this period. Butter production was reduced by over 60% while cheese production more than doubled. Australia had to find new markets for its dairy products. Asia offered great opportunities and Japan became our most important market for dairy products. Currently over 70% of dairy exports go to Asia and South East Asia.

14.26 NUMBER OF DAIRY FARMS, AS AT 30 JUNE

Year	NSW	Vic.	Qld	SA	WA	Tas.	Aust.
1950	16 685	27 975	21 475	7 751	4 432	4 161	82 479
1960	15 430	26 004	17 960	6 600	4 502	4 352	74 848
1966	12 230	23 430	12 560	5 450	2 283	2 979	58 932
1970	8 733	19 803	8 931	4 111	1 650	3 232	46 460
1975	4 805	14 920	4 622	3 064	961	2 229	30 601
1980	3 601	11 467	3 052	1 730	622	1 522	21 994
1985	2 838	10 850	2 544	1 300	626	1 184	19 342
1990	2 220	8 840	1 970	969	496	901	15 396
1995	1 911	8 379	1 746	819	479	832	14 166
1996	1 853	8 275	1 693	791	457	819	13 888

Source: ABS-Note: Farms with less than 10 dairy cows omitted; State Departments of Agriculture and State Milk Authorities.

RELIABLE FRESH MILK SUPPLIES

Milk has two primary uses, firstly for the fresh liquid milk market and secondly for the production of manufactured products (such as cheese and butter) for domestic and export markets.

In 1933 the Victorian Milk Board was formed under State legislation with the objectives of ensuring quality control and a regular supply of fresh milk to the community. The price farmers received for their milk and the price consumers paid was also controlled.

There have been numerous changes since the establishment of the original Victorian Milk Board. Currently the Victorian Dairy Industry Authority is responsible for the regulation of the liquid milk market including promotion, pricing, distribution and quality. The regulation of retail pricing, distribution and sourcing of liquid milk has been progressively removed. Full deregulation of the liquid milk market is expected to proceed under national competition policy requirements, and is likely to be completed by the turn of the century. The expected increase in competition from deregulation should result in generally lower prices to consumers, increased diversity of products and better utilisation of industry infrastructure and plant, making for an even more efficient industry.

MAINTAINING THE COMPETITIVE EDGE

Research, extension and quality assurance services have played an important part in the development of the dairy industry. Increases in productivity, responsible use of the natural resource base and ensuring that milk produced is safe and free of contaminants, are the focus of government services to the Victorian dairy industry.

The increases in production and the international competitiveness of the industry are an indication of the level of uptake of improved farming practices by dairyfarmers and improved genetic stock of dairy cows.

14.27 WHOLE MILK PRODUCTION

Year ended 30 June	NSW	Vic.	Qld	SA	WA	Tas.	Aust.
1950	1 420	2 133	1 278	406	225	168	5 630
1960	1 589	2 720	1 148	357	262	319	6 395
1970	1 418	4 057	870	483	254	469	7 551
1980	907	3 151	508	329	222	315	5 432
1990	879	3 787	629	356	267	343	6 263
1995	1 087	5 114	740	485	343	437	8 206
1996	1 114	5 482	751	513	342	514	8 716

Source: Australian Dairy Corporation.

The introduction of artificial insemination in the 1950s allowed dairy farmers to progressively improve the production potential of their herds. The Australian Dairy Herd Improvement Scheme which began in 1982 has enabled more accurate evaluation of the breeding potential of dairy cattle and has been able to select cattle with traits that better match the needs of industry such as increased protein levels in milk. Combined with improved pasture species, increased use of fertiliser, improved pasture management and strategic grain feeding, the Victorian dairy industry has significantly improved on-farm productivity. Table 14.28 shows that the average annual per cow production has more than doubled since 1960.

14.28 AVERAGE ANNUAL MILK PRODUCTION PER COW, AUSTRALIA

Year ended 30 June	Litres
1950	1 746
1960	1 959
1970	2 650
1980	2 848
1985	3 337
1990	3 781
1995	4 481

Source: Australian Dairy Corporation.

'Target 10', which is the extension component of the Victorian dairy industry development program, has played an important role over the last five years in demonstrating to farmers the benefits of changing farming practices to improve profitability. Target 10 is an informal partnership between industry, government and agribusiness. The Victorian dairy industry is reliant upon a relatively low cost of milk production as a major source of competitive advantage with the rest of the world. This being the case, the Target 10 project initially set out to increase the utilisation of pasture by 10% on half of Victoria's 8,000 dairy farms within five years. Over the first four years of the program, approximately 35% of farmers have participated in the grazing management program. The project has since been broadened to cover other priority farming issues including animal nutrition, farm development as well as soils and fertiliser management.

**MANUFACTURED
DAIRY
PRODUCTS**

The manufacturing segment of the dairy industry has undergone substantial structural change over the past twenty-five years, particularly so in the last ten years enabling the industry to be internationally competitive. Changes have occurred in both the number and size of firms and in the product mix. Mergers and takeovers have featured in structural adjustment, and have resulted in greater concentration of ownership in the industry. The effect has been factory closures and increased investment in new plant and equipment at the remaining factories. Milk processing has made major technological progress in this time with advances such as large scale continuous cheesemaking plants, large capacity spray driers, ultrafiltration/reverse osmosis plants and ultra heat treatment of liquid milk. New technology has enabled the production of milk tailored to consumer requirements such as modified lactose, fat and calcium contents. The proportions of milk used for manufacturing are cheese 36%, skim milk powder and butter 40%, whole milk powder 14%, casein/butter 3% and other products 6%.

**FUTURE
PROSPECTS**

Industry forecasts for the dairy industry are confident due to anticipated gains from international trade reforms and continued demand from Asian markets. Strong competition in these markets will be maintained which will force farmers and processors to continue to achieve productivity gains. Victorian exports have concentrated on producing bulk commodities (cheese, butter, milk powder). In the medium term, processors are likely to shift production to products tailored to meet the specific needs of end-users.

On current trends, Victorian milk production is expected to increase from 5,482 ML to 10,800 ML in 2010 (70% of Australia's production). The number of farms is expected to decline from 8,275 to about 7,000 and the average herd size will increase from 145 cows to 250 cows. Annual production per cow will increase from about 4,745 litres to 5,800 litres. Eighty per cent of the Victorian herd will be artificially bred and 50% of herds will have automatic milk recording. Dairy farm numbers will generally contract with most contraction in West Gippsland due to residential and other land use pressures.

The image of Victorian dairy products and other food will play an important role in securing overseas and local markets. Community concerns over 'clean and green' production will reinforce the commitment of the dairy industry to produce milk in an environmentally responsible way. The dairy industry will continue to be a major contributor to the Victorian economy through increased export income and employment and profits to the rural sector.

Photo:

Dairy cows

Delete keylines

Source: Primary Industries Division, Department of Natural Resources and Environment, Victoria.

Pigs

Pig farming has been undergoing rapid change over the last few years with many smaller producers leaving the industry. The number of commercial establishments with pigs declined by 18% from 714 to 613. At the same time the number of pigs has risen by over 4% to 458,000 pigs, the average number of pigs per establishment has risen by nearly 28% from 586 to 748.

Poultry

In 1995-96 Victorian egg production for human consumption was 40.1 million dozen, 23% of the total Australian production. The gross value of production was \$51.3 million.

At 31 March 1996 there were 3.0 million hens for egg production held on farms, including replacement and breeding stock. The average size of farms was 17,000 hens, although there are many larger farms with up to 40,000 plus layers. The main areas for commercial egg production are centred on the outskirts of the Melbourne Statistical Division; other significant regions are the Goulburn, Barwon, Gippsland and Loddon Statistical Divisions.

14.29 POULTRY SLAUGHTERED FOR HUMAN CONSUMPTION, VICTORIA

Year ended 30 June	Chickens (i.e. broilers, fryers, or roasters) '000	Other fowl and turkeys '000	Ducks and drakes '000
1992	73 921	1 938	735
1993	78 615	1 391	830
1994	85 798	1 782	821
1995r	77 193	1 374	935
1996	85 411	1 789	1 246

Source: *Livestock Products Australia* (7215.0); ABS unpublished data.

In 1995–96, 85 million chickens were slaughtered for human consumption. The total dressed weight was 128,000 tonnes. The gross value was \$209.7 million or 22% of the Australian total of \$961.3 million.

The main broiler production centres are located on the Mornington Peninsula, in areas east and south-east of Melbourne, the Geelong area, and the Goulburn Statistical District—near the processing works and the main centres of consumption. Most of Victoria's production is consumed locally.

14.30 DRESSED WEIGHT(a) OF POULTRY SLAUGHTERED, FRESH AND FROZEN(b), VICTORIA

Year ended 30 June	Chickens (i.e. broilers, fryers, or roasters) '000 kg	Other fowl and turkey '000 kg	Ducks and drakes '000 kg
1992	107 049	3 565	1 399
1993	114 587	2 474	1 567
1994	123 529	3 170	1 547
1995r	109 515	3 661	1 751
1996	127 736	4 164	2 326

(a) Dressed weight of whole birds, pieces, and giblets intended for sale as reported by producers.

(b) Fresh: sold immediately after slaughter or chilled for sale soon after. Frozen: frozen hard for storage of indefinite duration.

Source: *Livestock Products, Australia* (7215.0); ABS unpublished data.

Apiculture

Honey production in Victoria was 4,415 tonnes in 1995–96. The bulk of the honey produced is sold to large processors who clarify and pack it.

14.31 BEEHIVES, HONEY, AND BEESWAX, VICTORIA

Year ended 30 June	Production			
	Apiarists no.	Beehives no.	Honey tonnes	Beeswax tonnes
1992	118	56 540	3 579	56
1993	129	57 562	3 160	65
1994	322	88 742	4 905	194
1995	294	82 704	3 302	58
1996	254	81 506	4 415	80

Source: *AgStats on Floppy Disk* (7117.0).

FISHING

Australia's fisheries stocks are extremely diverse but, by world standards, its marine ecosystem is relatively unproductive. The Australian Fishing Zone covers an area 16% larger than the Australian land mass and is the third largest fishing zone in the world. However, Australia's fish production is small by world standards. This reflects low productivity of the oceans rather than under-exploitation of the resource.

Over 3,000 species of marine and freshwater fish and at least an equal number of crustacean and mollusc species occur in and around Australia. Fewer than 100 of these are commercially exploited, the major species being prawns, rock lobster, abalone, tuna, other fin fish, scallops, oysters and pearls. Australian fishing operators concentrate their efforts on estuarine, coastal, pelagic (surface) species and demersal (bottom living) species that occur on the continental shelf.

In 1993–94, Australians consumed 3.5kg of edible weight fresh and frozen fish per person sourced from Australian waters, and 2.1kg of imported fish. The consumption per person of crustaceans and molluscs (such as prawns, lobsters, crabs and oysters) was 1.5kg. A further 3.1kg per person was consumed in the form of prepared seafood products.

Aquaculture, or 'fish farming', is an alternative to harvesting the naturally occurring fish stocks and has considerable potential as a means of ensuring sustainability of harvesting yields. Aquaculture industries are established in all States, with species involved ranging from pearl oysters to freshwater trout. The industry has experienced rapid growth during the past six years, with the value of production rising from \$188 million in 1989–90 to \$419 million in 1994–95.

Victorian fisheries

Statistics relating to the Victorian fisheries catch are produced by the Victorian Fisheries Research Institute on behalf of Victorian Fisheries. Data is supplied by licensed commercial fishers, the Melbourne Fish Market and selected fish processors.

As at August 1996, there were 922 personal fishing licences and 1,034 boat licences valid in Victoria.

14.32 ANNUAL FISHERIES CATCH, LANDED COMMERCIALLY IN VICTORIA(a)

Fish	Production, live weight			Value		
	1994–95 tonnes	1995–96 tonnes	1996–97 tonnes	1994–95 \$'000	1995–96 \$'000	1996–97 \$'000
Freshwater	655	693	789	1 372	1 510	1 493
Abalone	1 447	1 532	1 453	42 546	37 630	41 997
King Crab	54	41	61	768	535	1 720
Rock Lobster	510	483	455	15 862	14 262	14 152
Scale Fish	5 381	5 268	3 627	9 747	11 222	8 818
Scallops	418	2 657	575	846	5 313	1 150
Squid(c)	1 317	94	75	1 899	405	327
Shark	1 416	1 514	1 154	8 172	9 777	7 807
Other	1 037	331	249	1 250	905	554
Total	12 235	12 613	8 438	82 462	81 559	78 018

(a) This information is based on mandatory fishing returns submitted by commercial fishers. The figures do not take into account returns not received or processed.

Source: Victorian Fisheries Research Institute, Department of Natural Resources and Environment.

The drop in production between 1995–96 and 1996–97 was mainly due to scallops, which decreased from 2,657 tonnes to 575 tonnes. The population of scallops can be quite unstable and may vary markedly from year to year.

FORESTRY

Forests are an important sustainable natural resource providing a wide range of essential products and benefits to the community.

Forest vegetation cover protects the soil from water and wind erosion, reduces the potential for flooding and siltation of water bodies and sustains water quality. Forests also act as an agent in the absorption of greenhouse gases and provide habitats for a wide variety of native animals and plants.

The forest and wood products industries, based on native and plantation forests, contribute substantially to Australia's economy and provide substantial employment in regional areas. Forests are also valuable ecosystems providing a gene pool of great diversity for scientific investigation; a source of honey, oils, gums, resins and medicines; and a resource base for education, tourism and recreation.

Forests cannot necessarily provide for all uses at the same time, but careful management can ensure that forests provide multiple benefits in the long term for the Australian community.

Farm forestry is becoming increasingly important as a potential commercial source of timber. A broad range of programs have been implemented by government and private agencies to promote landcare and reafforestation on Australian farms.

The Forest Estate

Australia's forest estate is made up of 155.8 million hectares of native forest and 1.043 million hectares of plantations (about 20% of Australia's land area), according to the most recent inventories available (National Forest Inventory, 1997, and National Plantation Inventory 1997).

Native forest

The native forest inventory was conducted based on the 1992 National Forest Policy Statement (NFPS) definition of forest.

Native forest is defined as: *'an area, incorporating all living and non-living components, that is dominated by trees having usually a single stem and a mature or potentially mature stand height exceeding 2 metres, and with existing or potential projected canopy cover of overstorey strata about equal to or greater than 20 percent'*. This definition includes Australia's diverse native forests, regardless of age. It is also sufficiently broad to encompass areas of trees that are sometimes described as woodlands.

Using this definition, the total area of native forest was estimated at 155.835 million hectares at 30 June 1997.

To date, the term 'forest' has referred to ecosystems dominated by tall, relatively densely spaced trees, and 'woodlands' has been used where the trees are smaller or more widely spaced or open. However, at times 'forest' has been broadened to include woodlands and as in earlier Quarterly Forest Product Statistics, also narrowed to equate to only 'commercially exploitable trees' or trees generally more than 20 meters high. The difficulty in using the apparently simple terms of forest and woodland is that there has always been debate about where the boundary between them should lie. The native forest areas reported here include regrowth forest on agricultural land where they could be identified in the mapping process.

The NFPS definition was modified to reduce uncertainty in relation to projected canopy cover and height. The definition refers to 'usually' single stemmed trees, which recognises that the mallees multi-stemmed eucalypt trees must be included. To make this possible the lower tree height limit has been set at two metres, a reduction from five metres. The full definition, which requires the vegetation to be of tree formation, excludes shrublands, even if they are higher than two metres. This reduction in the minimum height makes no significant difference to the total area of forest, adding only about 4–5 per cent of the total.

There is currently no national standard used for mapping. Nationally tree height information has either been collected or reclassified by the National Forest Inventory into three categories:

- low — 2–10 meters
- medium — 11–30 metres
- tall — greater than 30 metres

14.33 NATIVE FOREST AREAS BY FOREST TYPE AND OWNERSHIP

	Victoria '000 ha	Australia '000 ha	Victoria as a percentage of Australia %
DOMINANT CANOPY SPECIES			
Eucalypt			
Tall	2 825	6 543	43.2
Medium	2 986	91 450	3.3
Low	76	14 700	0.5
Mallee	958	11 764	8.1
Unknown	—	6	0.0
Total Eucalypt	6 845	124 463	5.5
Acacia	17	12 299	0.1
Meleleuca	18	4 093	0.4
Rainforest	3	3 583	0.1
Casuarina	—	1 052	0.0
Mangrove	5	1 045	0.5
Callitris	37	867	4.3
Other	360	8 435	4.3
Total	7 285	155 835	4.7
TENURE			
Public ownership			
Multiple use forests	3 346	13 351	25.1
Nature conservation reserve	2 710	17 580	15.4
Other crown land	165	15 597	1.1
Leasehold	—	66 103	0.0
Total public ownership	6 220	112 631	5.5
Private ownership	1 038	42 018	2.5
Unresolved tenure	26	1 186	2.2
Total	7 285	155 835	4.7

Source: Bureau of Resource Sciences.

Of Victoria's 7.3 million hectares of native forest at June 1997, 6.2 million hectares (85%) were publicly owned and 1.0 million hectares (14%) were on private land. Of the publicly owned forests, 2.7 million hectares (44%) were in nature conservation reserves, 3.3 million hectares (54%) were managed by State forest authorities for multiple uses, including wood production, 0.2 million hectares were in other Crown land and none were under lease. This distribution is very different from Australia as a whole. A greater proportion of Victoria's forests are in public ownership than in the rest of Australia. Of the Victorian forests in public ownership, a greater proportion are either in nature conservation reserves or are in multiple use forests managed by State forest authorities. No Victorian publicly owned forest is leased.

Plantations

Under the National Forest Policy Statement ratified by the Commonwealth, State and Territory Governments in 1992, Australia is committed to expanding its plantation estate. Previously, the National Afforestation Program was established to stimulate an expansion in the commercial hardwood timber resource and to assist in land rehabilitation through broadacre commercial plantations (including farm forestry).

In July 1996, the Ministerial Council on Forestry, Fisheries and Aquaculture agreed to a national goal of trebling Australia's forest plantations estate by the year 2020.

The National Plantation Inventory (NPI) project was established to collect up to date quantitative data about Australia's plantation resources (both hardwood and softwood) based on growers' information, focussing on growers with plantation estates exceeding 1,000 hectares. Information includes location, area, species and 5 year planting periods of standing plantations.

The first report of the NPI of Australia (National Forest Inventory 1997) aggregates comprehensive information on Australia's standing plantation forest resources at regional and national scales.

The NPI was not provided with complete figures for annual establishment rates.

14.34 PLANTATION AREAS CLASSIFIED BY SPECIES AT 31 MARCH 1995

Species	Victoria r ha	Australia r ha	Victoria as a percentage of Australia %
Coniferous			
<i>Pinus radiata</i>	195 195	642 940	30.4
<i>Pinus elliottii</i>	—	72 880	0.0
<i>Pinus pinaster</i>	761	28 880	2.6
<i>Pinus caribaea</i>	—	54 160	0.0
<i>Araucaria</i> species	—	45 300	0.0
Other	73	39 680	0.2
Total	196 029	883 840	22.2
Broadleaved			
<i>Eucalyptus</i> species	19 307	158 370	12.2
<i>Populus</i> species	40	40	100.0
Other	—	230	0.0
Total	19 347	158 640	12.2
Grand Total	215 380	1 042 500	20.6

Source: Australian Bureau of Agricultural and Resource Economics-Quarterly Forest Products Statistics.

The NPI reports there are approximately 1.043 million hectares of standing plantations in Australia at the end of 1994, representing a very small proportion (less than 0.2%) of Australia's landmass. 883,840 hectares are softwood (mostly *Pinus Radiata*) and 158,640 hectares are hardwood species. Although more recent information was provided to the NPI, the inventory is only nationally complete to March 1995. The predominant species in Victoria is *Pinus radiata*. There are however increasing areas of Eucalypt species being established in Victoria.

The increasingly commercial focus of State/Territory plantation operations, and their separation from forestry services in a number of States, has created difficulties in the collection of annual forest area statistics at the State level for the past five years and some private growers have also expressed concerns about providing data to agencies in direct competition with them. To maintain grower confidentiality, the inventory has not distinguished between different ownership classes.

Source: Philip Tickle, Debbie Lamb, Roger Hnatiuk and Claire Howell, Bureau of Resource Sciences.

MINING

Mining has played a significant part in Victoria's economic development since the discovery of gold in central Victoria in 1851.

Much of Victoria's industry, transport and infrastructure, including the growth of towns such as Bendigo, Ballarat and Melbourne itself, can be traced back to the impetus of the discovery and mining of gold and other minerals.

Today, mineral exploration and extraction remains a significant component of Victoria's economic activity, in particular, the extraction of oil and natural gas from the rich Bass Strait off-shore fields.

In 1995–96, the Victorian mining industry contributed 16.0% of the Australian mining component of Gross Domestic Product (GDP) at factor cost. In the same period, the mining industry accounted for 2.9% of Victoria's Gross State Product (GSP) at factor cost.

The mining component of GDP includes the extraction of minerals occurring naturally as solids, such as coals and ores, liquids, such as crude petroleum, and gases such as natural gas.

In 1995–96, Victoria's main mining outputs were oil and gas from Bass Strait, gold from mining ventures in central Victoria and brown coal for use in the power stations of the LaTrobe Valley. Additionally, small quantities of zinc, copper and bauxite were also mined.

14.35 MINING, SUMMARY OF OPERATIONS, VICTORIA

Year	Establishments at June 30		Wages and salaries(b)		Stocks		Purchases, transfers in, selected expenses \$m	Value added(c) \$m
	no.	Employment(a) no.	\$m	\$m	Opening \$m	Closing \$m		
1990-91(d)	9	1 517	100.4	4 037.9	35.2	33.2	130.6	3 905.3
1991-92(d)	11	1 031	124.5	3 630.6	46.1	61.5	170.9	3 475.1
1992-93	116	2 108	90.1	4 310.5	82.7	65.5	332.6	3 960.7
1993-94(d)(e)	29	2 225	139.6	4 082.6	46.9	43.8	328.5	3 750.9
1994-95(d)(e)	25	2 036	139.5	3 434.6	41.4	52.3	1253.1	3 178.8
1995-96(d)(e)	22	1 900	115.3	3 275.6	51.6	51.6	236.5	3 039.1

(a) At 30 June, including working proprietors. (b) Excludes drawings of working proprietors. (c) Value added is calculated by adding to turnover the increase (or deducting the decrease) in value of stock and deducting the value of purchases and selected items of expense. All components needed to calculate value added are only collected triennially. (d) The 1990-91, 1991-92, 1993-94 and 1994-95 (truncated) censuses differ from previous mining censuses in that the construction materials and other non-metallic minerals industries have been excluded. (e) Includes brown coal mining operations of the former State Electricity Commission of Victoria.

Source: *The Australian Mining Industry* (8414.0).

At 30 June 1996, 1,900 people were employed in the mining industry in Victoria, 1,360 in coal and metal ore mining (72%) and 540 in oil and gas mining (28%).

This represents a fall in employment of 7% over 1994-95. This fall was mainly accounted for by a fall in employment of 7% in the coal and metal ore mining sector, while the oil and gas extraction also decreased by 5%.

The oil and gas mining sector showed a far higher level of concentration of employment than coal and metal ore mining. The three establishments in this sector employed an average 180 workers each, whilst the 19 coal and metal ore mining establishments employed an average of 76 workers each.

14.36 MINING INDUSTRY EMPLOYMENT, VICTORIA

Items	Unit	Coal mining and metal ore mining		Oil and gas extraction		Total coal mining, oil and gas extraction and metal ore mining	
		1994-95	1995-96	1994-95	1995-96	1994-95	1995-96
Number of establishments at 30 June	no.	22	22	3	3	25	22
Employment at 30 June							
Males	no.	1 400	1 302	526	510	1 926	1 812
Females	no.	70	58	40	30	110	88
Total	no.	1 470	1 360	566	540	2 036	1 900
Persons employed per establishment	no.	66.8	75.8	188.7	180.0	81.4	86.8
Employment type							
Administrative office and sales	no.	164	190	188	180	352	370
Production and all other	no.	1 306	1 170	378	360	1 684	1 530
Employees working below ground	no.	90	116	0	0	90	116
Wages and salaries	\$m	100.7	78.1	38.8	37.2	139.5	115.3

Source: *The Australian Mining Industry* (8414.0).

Brown coal

Most of Australia's measured resources of brown coal are located in Victoria's Latrobe Valley. Brown coal is by far Victoria's most valuable solid mineral commodity, with the 1995-96 production (54.3 million tonnes) valued at an estimated \$465 million. Production in 1994-95 was 50.6 million tonnes.

Metallic minerals

Victorian gold production increased dramatically from a low base of 41kg in 1979–80, largely as a result of the Wonga open cut mine at Stawell coming on stream. In 1990–91, Victorian production peaked at 4,863 kilograms of gold bullion (doré) and 1 tonne of gold concentrate, valued at \$70.9 million. Gold production then fell by over 30% in 1991–92 before steadily rising to around 4,000 kilograms in 1992–93. Production increased by nearly 10% between 1993–94 and 1994–95, from 3,984 kilograms to 4,370 kilograms. It has increased a further 11% during 1995–96 to 4,838 kilograms, nearly equal to the 1990–91 peak.

Copper concentrate production dropped off in 1995–96 to 8,000 tonnes from the 1994–95 figure of 58,000 tonnes. Zinc concentrate production rose slightly to 14,000 tonnes. The only other metallic mineral produced in any quantity in Victoria has been bauxite. However production has generally been sporadic—in 1995–96 only 1,000 tonnes were mined.

14.37 MINERALS PRODUCED, VICTORIA AND AUSTRALIA

Mineral	Unit	Victoria		Australia
		1994–95	1995–96	1995–96
Oil and gas				
Crude oil-stabilised (incl. condensate)	megalitres	14 598	12 732	30 763
Natural gas(a)	gigalitres	5 480	6 299	19 169
Ethane	gigalitres	189	180	199
Liquefied petroleum gases(b)				
Propane	meegalitres	1 395	1 275	2 092
Butane	meegalitres	1 139	1 037	1 544
Liquefied natural gases	'000 tonnes	0	0	7 346
Metallic minerals				
Bauxite	'000 tonnes	2	1	50 724
Copper concentrate	'000 tonnes	58	8	1 297
Gold bullion (dore)(c)	kg	4 370	4 838	287 524
Zinc concentrate	'000 tonnes	13	14	1 088
Coal (lignite)				
For briquettes	'000 tonnes	750	n.a.	n.a.
Other	'000 tonnes	49 929	54 281	54 281

(a) Includes field and plant usage. (b) Excludes refinery production. (c) Includes alluvial gold.

Source: *The Australian Mining Industry* (8414.0).

Oil and gas production

In 1995–96, Victoria's Bass Strait produced 12,262 megalitres of crude oil, and 6,656 gigalitres of natural gas. This highlights the importance of the Bass Strait field to Australia's economy, as one of only three off-shore oil and gas fields (the other two being in the Timor Sea and the North-West Cape, both in Western Australia). Victoria has a very much smaller on shore oil and gas field in the Otway region, but its production is negligible compared with Bass Strait.

14.38 REFINING CAPACITY, VICTORIA, AT 31 DECEMBER 1996

Refining Company	Location	Capacity b/sd(a)
Mobil Refining Australia Pty Ltd	Altona, Vic (1949)	110 000 (or 5 343 000 tonnes/year)
Shell Refining (Australia) Pty Ltd	Geelong, Vic (1954)	110 000 (or 5 343 000 tonnes/year)

(a) b/sd: barrels per stream day. Barrels per day are multiplied by 46.42 to convert to tonnes per year.

Source: *Australian Institute of Petroleum Ltd: Oil and Australia Statistical Review*, 1997.

The total Australian refining capacity as at 31 December 1994 was 813,000 barrels per stream day (b/sd) or 38,194,000 tonnes per year. The Australian lubricating oil refinery capacity at the same date was 16,510 b/sd or 766,000 tonnes per year. Refineries do not operate at 100% capacity for 365 days per year, with maximum operating capacity generally around 85–88% of designed capacity. Actual capacity at any given time depends on the type of crude oil being processed.

14.39 ESTIMATED HYDROCARBON RESERVES, BASS STRAIT, VICTORIA

Item	Unit	At 30 June	
		1995	1996
Crude oil and condensate	gigalitres	110.0	110.2
Natural gas	giga cubic metres	135.3	130.8
LPG	gigalitres	34.9	33.5

Source: *Department of Energy & Minerals, Victoria: Minerals and Petroleum Victoria, Statistical Review*.

REFERENCES

Data sources

The majority of agricultural statistics in this chapter are derived from the Agricultural Census conducted at 31 March each year.

Estimated Value of Agricultural Operations (EVAO) is an aggregation of derived values for all crop and livestock activity for each unit. It should be noted that EVAO is applicable only for industry coding and size valuation purposes. It is not an indicator of receipts obtained by units, nor of the actual value of agricultural commodities produced by these units.

Gross Value of production is the value placed on production at the wholesale prices realised in the market place.

ABS Sources

Australian National State Accounts (Cat. no. 5220.0)

Agriculture, Victoria (Cat. no. 7113.2)

Agstats on floppy disk (Cat. no. 7117.0)

Livestock Products Australia (Cat. no. 7215.0)

The Australian Mining Industry (Cat. no. 8414.0)

Value of Agricultural Commodities Produced Australia (Cat. no. 7530.0)

Non-ABS sources

Australian Dairy Corporation

Australian Institute of Petroleum Ltd: Oil and Australia Statistical Review, 1996

Australian Wheat Board

Department of Energy & Minerals, Victoria: Annual Report 1993-94

Victorian Fisheries Research Institute, Department of Natural Resources and Environment

Chapter 15

Housing and Construction

Photo:

Construction site

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OVERVIEW

Building activity makes a significant contribution to the Victorian economy, both directly and indirectly. New dwelling approvals in particular are recognised as a leading economic indicator.

This chapter presents information on the Victorian construction industry; value of building, residential and non-residential data, engineering construction and housing loans.

Construction

In 1995–96 the construction industry sector contributed 6% of Gross State Product (GSP) at factor cost. Victoria's percentage share of the national GSP at factor cost for the construction industry sector was 22%.

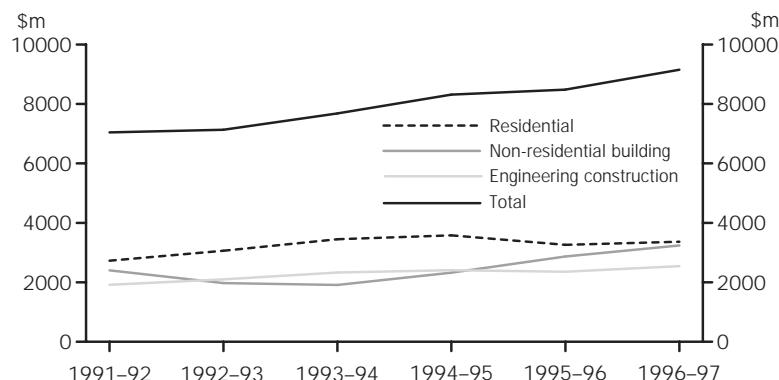
At current prices the value of construction work in Victoria during 1996–97 was \$9,078.6 million. This represented a 7% increase over the previous financial year.

15.1 VALUE OF CONSTRUCTION WORK DONE, CLASSIFIED BY TYPE, VICTORIA

Type of construction	1991–92 \$m	1992–93 \$m	1993–94 \$m	1994–95 \$m	1995–96 \$m	1996–97 \$m
Residential building	2 724.7	3 062.5	3 450.1	3 581.5	3 261.2	3 366.4
Non-residential building	2 404.2	1 970.7	1 902.2	2 322.0	2 870.0	3 240.0
Engineering construction	1 915.7	2 098.2	2 329.1	2 409.1	2 352.6	2 472.2
Total	7 044.6	7 131.4	7 681.4	8 312.6	8 483.8	9 078.6

Source: *Building Activity, Victoria* (Cat. no. 8752.2) and *Engineering Construction Activity, Australia* (Cat. no. 8762.0).

VALUE OF CONSTRUCTION WORK DONE, VICTORIA



Source: *Building Activity, Victoria* (Cat. no. 8752.2), *Engineering Construction Activity, Australia* (Cat. no. 8762.0).

Residential building

Residential building (including alterations and additions) to the value of \$3,366 million accounted for 37% of the value of all construction work done during 1996–97. New houses accounted for 59% of residential building while new 'other residential building' and 'alterations and additions' accounted for 18% and 23% respectively.

Between 1995–96 and 1996–97 the value of work on new houses decreased by 6%. Over the same period, the value of other residential building work increased by 34% while the value of alteration and addition work increased by 11%.

15.2 VALUE OF RESIDENTIAL BUILDING WORK DONE, CLASSIFIED BY TYPE, VICTORIA

Type of building	1991-92 \$m	1992-93 \$m	1993-94 \$m	1994-95 \$m	1995-96 \$m	1996-97 \$m
Residential						
Houses	1 993.4	2 286.7	2 520.8	2 573.9	2 111.1	1 983.8
Other residential buildings	181.0	196.3	278.4	300.0	452.0	607.7
Alterations & additions to residential buildings	550.3	579.5	651.0	707.5	698.1	775.0
Total	2 724.7	3 062.5	3 450.1	3 581.5	3 261.2	3 366.4

Source: *Building Activity, Victoria* (Cat. no. 8752.2).

New dwelling units

The number of new dwelling units approved during 1996-97 increased by 18% over the previous year. Of the 27 869 approvals, approximately 71% were houses. Private sector activity accounted for about 93% of the number of new dwelling units completed and conversions about 4%.

15.3 NUMBER OF NEW DWELLING UNITS APPROVED BY TYPE AND OWNERSHIP BY STATISTICAL DIVISION, VICTORIA, 1996-97

Statistical division	Private sector			Public sector			Conversions etc.	Total
	Houses	Other	Total	Houses	Other	Total		
Melbourne	13 725	5 942	19 667	136	311	447	1 189	21 303
Barwon	1 212	162	1 374	—	—	—	21	1 395
Western District	303	20	323	6	—	6	5	334
Central Highlands	605	79	684	3	20	23	9	716
Wimmera	157	9	166	—	—	—	1	167
Mallee	292	7	299	3	2	5	1	305
Loddon	869	21	890	8	6	14	6	910
Goulburn	867	44	911	10	—	10	4	925
Ovens-Murray	437	44	481	30	17	47	1	529
East Gippsland	459	48	507	7	—	7	1	515
Gippsland	684	47	731	9	28	37	2	770
Total Victoria	19 610	6 423	26 033	212	384	596	1 240	27 869

Source: *Building Approvals, Victoria* (Cat. no. 8731.2).

Photo:

Housing

Delete keylines

15.4 NUMBER OF NEW DWELLING UNITS APPROVED BY TYPE AND OWNERSHIP, VICTORIA

Year	Private sector			Public sector			Conversions etc.	Total
	Houses	Other	Total	Houses	Other	Total		
1991-92	22 358	1 932	24 290	707	1 016	1 723	33	26 046
1992-93	25 969	2 186	28 155	1 189	227	1 416	12	29 583
1993-94	27 227	3 109	30 336	830	584	1 414	1 167	32 917
1994-95	25 284	3 225	28 509	601	808	1 409	1 347	31 265
1995-96r	18 425	3 218	21 643	464	937	1 401	663	23 707
1996-97	19 610	6 423	26 033	212	384	596	1 240	27 869

Source: *Building Approvals, Victoria* (Cat. no. 8731.2).

NUMBER OF NEW DWELLING UNITS APPROVED, VICTORIA



Source: *Building Approvals, Victoria* (Cat. no. 8731.2).

The average value of new houses approved during 1996-97 was \$109,665, an increase of 10% over the previous year and 28.0% over 1991-92, while the average floor area (214 sq.m.) increased by 8% and 22% over the same two periods. Of the 14,013 new houses that were approved during 1996-97, with materials of construction recorded, 82% had brick veneer external walls, 7% had timber external walls and 2% had fibre cement external walls; the remaining 9% were constructed of other materials.

15.5 NUMBER OF NEW HOUSES APPROVED BY MATERIAL OF OUTER WALLS, AVERAGE FLOOR AREA AND AVERAGE VALUE, VICTORIA

Year	Brick veneer	Timber	Fibre cement	Other	Not stated	Total	Average floor	Average value
							area sq.m.	\$
1991-92	13 940	1 546	219	627	6 733	23 065	175	85 668
1992-93	15 197	1 396	331	1 475	8 759	27 158	178	85 935
1993-94	15 758	1 264	352	890	9 793	28 057	182	89 959
1994-95	15 662	1 181	263	911	7 868	25 885	184	93 694
1995-96	10 604	665	221	844	6 555	18 889	198	99 920
1996-97	11 446	1 041	222	1 304	5 809	19 822	214	109 665

Source: *Unpublished ABS data from the collection: Building Approvals, Victoria*.

Housing loans

At current prices the value of new housing loan commitments during 1996–97 was \$11,346 million, a 12% increase over the 1995–96 level. In 1996–97, 88% of all housing loan commitments were made to banks, 2% to permanent building societies and 10% to other lenders.

15.6 HOUSING LOAN COMMITMENTS BY TYPE OF LENDER, VICTORIA

Year	All banks \$m	Permanent building societies \$m	Other lenders \$m	Total \$m
1991–92	5 632	440	510	6 582
1992–93	7 957	263	244	8 464
1993–94	10 382	488	139	11 009
1994–95	9 127	377	168	9 672
1995–96	9 162	179	811	10 152
1996–97	9 993	214	1 138	11 346

Source: PC Ausstats.

15.7 HOUSING LOAN COMMITMENTS BY PURPOSE, VICTORIA

Year	New dwellings(a)		Established dwellings(b)		Alterations and additions \$m	Total \$m
	Number of dwellings	Value \$m	Number of dwellings	Value \$m		
1991–92	17 840	1 231	67 898	5 093	258	6 582
1992–93	21 958	1 586	82 621	6 608	271	8 464
1993–94	24 574	1 932	105 761	8 437	640	11 009
1994–95	21 484	1 844	81 604	6 959	869	9 672
1995–96	16 848	1 577	89 902	7 829	747	10 152
1996–97	20 849	2 038	92 640	8 615	693	11 346

(a) Includes construction of new dwellings and purchases of newly erected dwellings. (b) Includes purchase of established dwellings and refinancing of existing housing loans.

Source: PC Ausstats.

VALUE OF HOUSING LOAN COMMITMENTS, VICTORIA

Source: PC Ausstats.

Non-residential building

Non-residential building accounted for 35% of the value of all construction work during 1996–97. The commercial sector of non-residential building (i.e. hotels, shops, factories, offices, and other business premises) accounted for 60% of the value of all non residential building work in Victoria during 1996–97, with office construction being the largest component. Building for community purposes accounted for the remaining 40%, with the largest component being building for entertainment and recreational purposes.

In the commercial sector, the value of hotel building work increased by 58% between 1995–96 and 1996–97 and the value of factory building work increased by 51%. Shop building work decreased by 10% from a six year high of \$487.0 million in 1995–96.

In the community sector, the 1996–97 value of work on buildings for miscellaneous purposes increased by 61% over the previous year and the value of work for health increased by 46%. The value of work for educational purposes decreased by 13%.

15.8 VALUE OF NON-RESIDENTIAL BUILDING WORK DONE, CLASSIFIED BY TYPE, VICTORIA

Type of building	1991–92 \$m	1992–93 \$m	1993–94 \$m	1994–95 \$m	1995–96 \$m	1996–97 \$m
Commercial						
Hotels, guest houses, etc.	102.1	33.6	38.7	51.8	158.2	250.1
Shops	177.2	207.3	330.7	464	487	437.7
Factories	450.4	317.3	247.4	245.4	240.4	362.1
Offices	942.9	617.3	335.7	393.1	456.4	467.7
Other business premises	133.7	196.5	198.4	354.9	383.8	418.6
Community						
Education	210.6	192.4	193.4	263.2	341.3	296.7
Religious	18.6	20.3	16.5	16.3	11.2	12.5
Health	113.3	178.1	272.1	209.5	138.2	201.1
Entertainment & recreation	151.7	92.4	157.6	219.7	515.2	570.9
Miscellaneous	103.7	115.4	111.7	104.2	138.2	222.5
Total	2 404.2	1 970.7	1 902.2	2 322.0	2 870.0	3 240.0

Source: *Building Activity, Victoria* (Cat. no. 8752.2).

Engineering construction

Engineering construction accounted for 27% of the value of all construction work during 1996–97. The value of engineering construction work in Victoria was \$2,472.2 million, of which 37% was undertaken by the public sector. Construction of roads, highways, and subdivisions accounted for 33% of the value of work, whilst telecommunications accounted for 29%.

15.9 VALUE OF ENGINEERING CONSTRUCTION WORK DONE BY TYPE, VICTORIA

Type of construction	1991–92 \$m	1992–93 \$m	1993–94 \$m	1994–95 \$m	1995–96 \$m	1996–97 \$m
Roads, highways, & subdivisions						
Roads, highways, & subdivisions	378.1	594.4	670.5	754.7	770.9	831.6
Bridges	68.9	54.5	40.5	38.2	31.2	24.8
Railways	66.8	64.9	105.9	130.4	86.1	87.8
Harbours	6.2	8.3	2.3	0.9	3.5	31.4
Water storage & supply	81.1	100.2	112.7	142.2	59.0	86.2
Sewerage & drainage	142.1	161.6	120.1	157.7	98.5	78.1
Electricity generation, transmission, & distribution	400.7	419.2	490.2	359.4	295.6	270.5
Pipelines	36.3	31.1	97.9	86.6	88.0	39.2
Recreation	34.3	56.1	70.6	74.9	82.8	119.8
Telecommunications	446.5	421.2	359.9	514.9	656.4	707.2
Heavy industry	237.1	176.3	252.6	148.6	178.9	179.5
Other	17.7	10.5	5.8	0.6	1.7	15.2
Total of all construction	1 915.7	2 098.2	2 329.1	2 409.1	2 352.6	2 472.2
By private sector	837.5	955.5	1 255.3	1 148.4	1 242.0	1 551.3
By public sector	1 078.1	1 142.7	1 073.8	1 260.7	1 110.6	920.9

Source: *Engineering Construction Activity, Australia* (Cat. no. 8762.0).

The value of telecommunication construction work done increased by 8% between 1995–96 and 1996–97 and the values of construction work done for roads, highways and subdivisions and for recreation increased by 8% and 45% respectively. The 1996–97 value of construction work done for electricity works decreased by 9% from the previous year.

CITY LIVING IN MELBOURNE

A small number of people have always chosen to live in the Central Business District (CBD) but an on-going significant increase in the population and housing stock of the CBD is a comparatively new phenomenon in Melbourne. The empirical evidence supporting this view comes from the City of Melbourne's Floorspace and Employment Survey (FLEMP) now known as The Census of Land-use and Employment (CLUE). The CLUE Survey is a longitudinal study of Melbourne's CBD land use and employment patterns, conducted once every five years since 1962.

CBD Residential Floorspace 1982 to 1992

According to the 1987 CLUE Survey, in the period 1982 to 1987 residential uses comprised only a relatively small proportion of total floor-space use, 4% in 1987. In the same period, the total amount of CBD floor-space rose 7% from 6,753,700m² in 1982 to 7,242,000m² in 1987. In 1987, commercial uses (including office and professional services) dominated the total amount of floor-space (27%) in Melbourne's CBD. The next biggest users of floor-space were government & community services (23%) and then retailing (11%).

In the period 1982 to 1992 the total amount of CBD residential floor-space, rose 66% from 207,351.63m² in 1982 to 345,909.9m² in 1992. An analysis, however, of the residential floor-space data for the period shows hotels/motels accounted for the largest proportion of residential floor-space use in the CBD (75%). The increase in residential floor-space use for permanent occupation is better reflected in the floor-space use for House and Flat/Apartment/Unit that show a significant, but more modest increase in floorspace amounts.

15.10 RESIDENTIAL FLOOR-SPACE USE, 1982 TO 1992

Type of residence	1982 m ²	1987 m ²	1992 m ²	Change, 1982 to 1992 %
House	765	1 370	1 789	133.8
Flat/apartment/unit	44 112	50 529	62 314	41.3
Hotel/motel	129 424	171 782	258 594	99.8
Hostel/backpackers	10 179	2 010	2 980	-70.7
Private hotel/boarding house	16 191	19 069	15 805	-2.4
Institutional accommodation	6 679	2 012	4 428	-33.7
Total	207 352	246 771	345 910	+66.0

Source: 1992 CLUE Database, City of Melbourne.

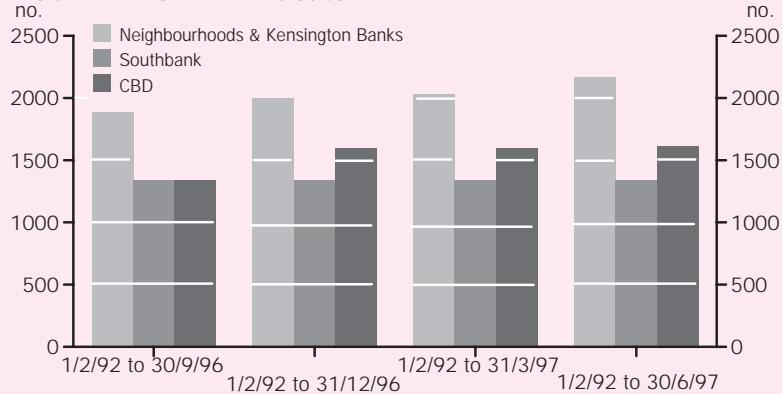
The Present Day: Postcode 3000

The recent growth in CBD residential development is the result of a convergence of many social and economic factors. Economic factors include lower interest rates and the availability of suitable sites for residential development, and social factors including the change in the type and location of housing preferred by Australians. Changes have also occurred due to a reduction in average household size, fewer births and an ageing population.

A rational consideration of the above factors led to the introduction of the Postcode 3000 program, a joint policy initiative of the State Government and the City of Melbourne aimed at encouraging greater levels of residential development in the municipality. It consists of a program of statutory and financial incentives designed to facilitate residential development in the City of Melbourne and in particular the CBD.

The success of Postcode 3000 has exceeded the Council's expectations with some 5,124 new dwellings constructed in the municipality since 1 February 1992. According to the Council's Housing Monitor (June 1997), of the 5,124 dwelling constructed since 1 February 1992, a total of 1,615 (32%) were constructed in the CBD. A further 1,378 dwelling units are under construction in the CBD, representing 70% of all units under construction within the municipality.

ESTIMATED NUMBER OF UNITS COMPLETED IN THE MUNICIPALITY BY SUB-REGION: 1 FEBRUARY 1992 TO 30 JUNE 1997
no.



Source: *City of Melbourne, Housing Monitor (#11), June 1997.*

Total Housing Stock in the Municipality

The 1991 Population and Housing Census figures showed that the estimated total number of dwellings in the City of Melbourne (inner and remainder based on the current municipal boundary) was 14,103. By Census Night (6 August 1996), the total number of dwellings in the municipality had risen by 4,316 to 18,419, a 31% increase since the 1991 Census.

Photo:
City dwellings
Delete keylines

According to the Council's Housing Monitor (June 1997), the number of dwelling units in the municipality (neighbourhood areas, CBD & Southbank based on the current municipal boundary) rose by 5,124 from 14,521 to 19,645, a 35% increase since monitoring began on 1 February 1992. As at 30 June 1997, another 1,925 new units were under construction in the municipality.

Total housing stock in the CBD

In 1991, the Census figures showed that there were 694 dwellings in the CBD. By Census Night (6 August 1996), there were 1,182 dwellings in the CBD, a 17% increase since 1991. According to the Council's Housing Monitor (June 1997), CBD housing stock levels continued to increase in the first & second quarters of 1997. By 30 June 1997, the number of dwelling units in the CBD had risen by 1,615 from 653 in 1992 to 2,268 in 1996, a 247% increase since monitoring began.

CBD Occupancy Rates

A constructed dwelling is not necessarily an occupied one. Occupancy must be considered before drawing conclusions about population increase. The occupancy rate for the CBD grid for private dwellings was 74% in 1996, down from 81% in 1991, according to the 1996 Census.

Future Residential Development Trends

An analysis of Council development records (planning and building applications) suggests that some 15–20% of all proposed residential developments fail to proceed beyond the building approval stage. On this basis, assuming that only 85% of all developments proceed to completion, there will be approximately 5,023 dwellings in the CBD, 2,425 dwellings in Southbank and 15,752 dwellings in the rest of the municipality (excluding the Docklands Area) by the year 2000. The Docklands Authority estimates a further 2,450 new dwellings could be completed in the Docklands area by the year 2005.

Future Plans and Prospects

In the future the City of Melbourne hopes to capitalise on the success of the Postcode 3000 program by promoting specialist niche markets in the housing field. The Council has already embarked on a campaign to coordinate investment in the student housing market and is identifying students' accommodation needs. The City of Melbourne will play an important role in monitoring the situation to determine whether such residential accommodation is adequately serviced.

The Council also acknowledges its responsibility to protect the city's low-income residents who have traditionally lived in the city's low cost hotels and boarding houses. Postcode 3000 has been extended to include an affordable housing program with partners such as Ecumenical Housing and Wintringham Hostels and the Community Housing Program. The Council has embarked on the development of 40 apartments for elderly low-income residents. Ebworth House at 540 Little Collins Street is already under conversion to 24 apartments as part of this project.

Source: Strategic Research Branch, City of Melbourne.

Disclaimer: The City of Melbourne has made every effort to verify the data contained in this report. It accepts no responsibility for any loss arising from the use of data in whole or part. The City of Melbourne reserves the right to revise previously published data without notice.

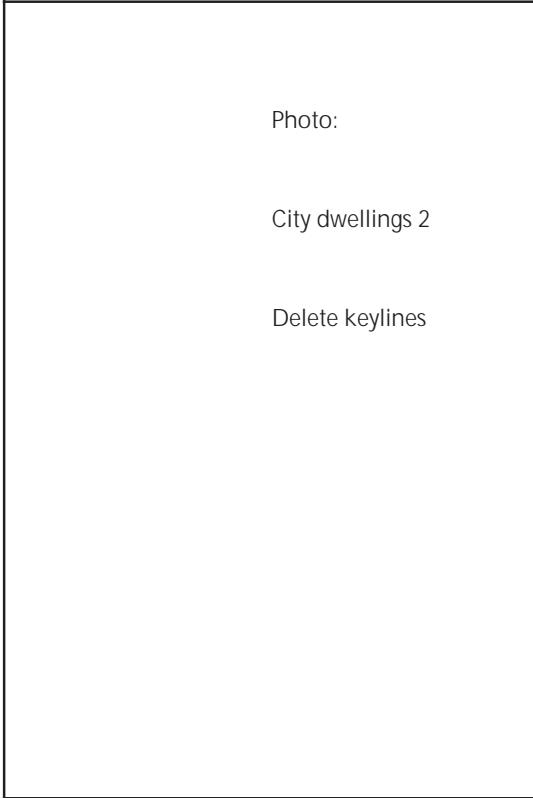
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Photo:

City dwellings 2

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REFERENCES

Definitions

Value of construction work done during the period represents the estimated value of work actually carried out during the quarter on construction jobs.

Value of buildings approved represents the anticipated completion value at the time of permit application, based on the estimated market or contract price of building jobs excluding the value of land and landscaping. Site preparation costs are included.

Data sources

The Building Approvals collection is based on building permits issued by local government authorities and licensed private building surveyors, and contracts let by, or day labour work authorized by Commonwealth, State, semi-government, and local government authorities.

The Building Activity Survey involves a sample survey of private sector house construction activity and a complete enumeration of building jobs other than private sector house construction.

The Engineering Construction Survey is based on a sample of all construction enterprises operating in Australia, in both the private and public sectors.

ABS sources

'Building in Victoria: A historical review', Victorian Year Book, 1994 (Cat. no. 1301.2)

Australian National Accounts, State Accounts (Cat. no. 5220.0)

Building Approvals, Victoria (Cat. no. 8731.2)

Building Activity, Victoria (Cat. no. 8752.2)

Building and Construction Activity, Australia (Cat. no. 8754.0)

Engineering Construction Activity, Australia (Cat. no. 8762.0)

Housing Finance Commitments, unpublished data

Chapter 16

Infrastructure

Photo:

Loop tram

Delete keylines

OVERVIEW

This chapter provides information relating to the transport industry: road, rail, air and sea, including data on public transport, road traffic accidents, motor vehicle registrations and drivers' and riders' licences.

Information is also provided about communications and energy with respect to communications technology and the usage of household computers, mobile phones, postal and media services, and the supply of electricity and gas reticulation.

TRANSPORT

In Victoria, an extensive transport infrastructure is supported by both Government and business. Road, rail, air and sea transport modes are all critical to the movement of freight and people for commercial and domestic purposes.

Road network

A comprehensive road and freeway network is maintained by VicRoads across Victoria. National Highways within Victoria are the Hume Freeway from Melbourne to the border with New South Wales at the Murray River, the Western Highway from Melbourne to the border with South Australia near Serviceton, the Sturt Highway between the South Australian border and Mildura and the Goulburn Valley Highway, from its junction with the Hume Freeway near Seymour to the New South Wales border.

Since January 1996 some re-measuring of road lengths has taken place by both VicRoads and Local Government. Care should be taken when comparing road lengths to previous periods.

The National Highway system is fully funded by the Commonwealth Government. A lower level of federal funding is available for projects on roads of National importance, such as the Calder Highway from Melbourne to Mildura.

16.1 VICTORIAN ROADS

Road type	Kilometres
Declared roads (at January 1997)	
National highways	1 005
State highways and freeways	6 739
Main roads	12 693
Tourist roads and forest roads	1 713
Total declared roads	22 150
Other roads (at 30 June 1996)	
Sealed roads	49 837
Formed and surfaced roads	49 654
Natural surface	28 827
Total other roads	128 318
Total roads	150 468

Source: VicRoads Pavement Condition Summary; Victoria Grants Commission.

In the metropolitan area, major bridgeworks on the South Eastern Arterial between Warrigal Road and Toorak Road are complete and in the eastern suburbs, a major extension of the Eastern Freeway from Doncaster Road through to Springvale Road (approximately 7 kilometers) opened on 8 December 1997.

In the western suburbs of Melbourne, VicRoads has completed the Western Ring Road, a primary by-pass route between the Princes and West Gate Freeways in the south-western suburbs and the Hume Freeway in the northern suburbs. Major engineering and bridging works were involved in this project which facilitates more efficient movement of both freight and passenger vehicles between the transport corridors linking Sydney, Adelaide, Melbourne ports, Melbourne airport and the provincial centres to the north and west of the State.

Links to north-eastern suburbs by extending the Ring Road in an easterly direction beyond the Hume Highway are planned while long term planning includes a link to the Scoresby Freeway in the eastern suburbs. The Princes Highway duplication between Yarragon and Trafalgar, to Melbourne's east is also complete.

During 1998 Vic Roads will complete major highway improvements including construction of the Bulla - Diggers Rest interchange and duplication between Diggers Rest and Gisborne on the Calder Freeway, the completion of the Ballarat Bypass on the Western Freeway and the duplication of the southern approaches to Shepparton on the Goulburn Valley Highway.

Melbourne City Link

The linking of three of Melbourne's major freeways, including substantial upgrading, is the core of the Melbourne City Link project. This project has been described as the largest engineering project undertaken in Australia since the Snowy Mountains Scheme. Between 6,000 and 8,000 jobs will be generated in Victoria during the construction phase, due for completion in 2000. There are two main facets to the project; a Western Link, involving upgrading of the southern end of the Tullamarine Freeway and construction of a new, elevated, six-lane freeway connection to the West Gate Freeway. This section incorporates a new 30 metre high bridge over the eastern end of the port of Melbourne. The Southern Link comprises a six-lane freeway connection from the West Gate Freeway to the South Eastern Arterial utilising two tunnels under the Kings Domain and Yarra River. The two tunnels will total five kilometres in length. The South Eastern Arterial will also be upgraded at its western end. The City Link project is on schedule.

In June 1997, the Government announced an addition to the City Link project in the form of an extension in a southerly direction of Exhibition Street to join Batman Avenue near the National Tennis Centre. This will provide alternative access to the South Eastern Arterial, facilitating movements to and from the major events precinct and the Central Activities District.

A private consortium has undertaken the contract to develop the Melbourne City Link project under a Build, Own, Operate, and Transfer (BOOT) arrangement with the entire project to be handed back to the Government after 34 years of operation by the consortium. Work on the project commenced during 1996 and is expected to be completed by 2000.

Tolls are planned for users of Melbourne City Link and will be collected using vehicle-mounted transponders, debiting the cost of travel against users' accounts. Day passes or temporary accounts will be available for visitors and other short term users. Tolls will be levied on a sectional basis and will vary by vehicle type.

A public display centre has been opened near the eastern portal of the Domain tunnel.

Motor vehicle registrations and drivers licences

There were a total of 2,819,174 motor vehicles (excluding motor cycles) registered in Victoria on 31 October 1996, an increase of 19,864 since the previous motor vehicle census held on 31 May 1995. There were also 69,790 motor cycles registered on 31 October 1996, a decrease of 780 since 31 May 1995. Passenger vehicles, excluding buses, were the largest single category of vehicles registered, with 2,335,426 registered in Victoria at 31 October 1996. This represented 512 passenger vehicles per 1,000 people in Victoria. The average age of passenger vehicles other than buses in Victoria was 11.0 years, compared with the average age of passenger vehicles for Australia of 10.4 years.

16.2 DRIVER'S AND RIDER'S LICENCES, VICTORIA, 30 JUNE

Type of licence	1991	1992	1993	1994	1995	1996	1997*
Driver's	2 785 753	2 826 735	2 855 904	2 873 252	2 894 132	2 928 250	2 981 882
Rider's	157 916	165 825	172 357	174 747	179 080	186 154	194 621
Total	2 943 669	2 922 560	3 028 261	3 047 999	3 073 212	3 114 404	3 176 503

Note: Licence holders may hold both a driver's and a rider's licence and be counted in both categories.

* 1997 data are for 16 July.

Source: *VicRoads, Information Services Department*.

Road accidents

Road traffic fatalities on Victoria's roads have fallen by 24% since 1990, while the number of persons seriously injured fell by 11% over the same period. Strategies designed to curb the incidence of speeding and driving while under the influence of alcohol are given much of the credit for these decreases. Another factor contributing to the reduction in injuries and fatalities has been a concerted attempt to eliminate many accident 'black spots' on Victoria's roads, a project funded by the Transport Accident Corporation (TAC). Television advertisements depicting violent accidents and their aftermath (funded by the TAC), are also believed to have a favourable impact on road users' behaviour.

16.3 ROAD TRAFFIC ACCIDENTS INVOLVING CASUALTIES, TYPE OF ROAD USER, VICTORIA

Type of road user	1993		1994		1995		1996	
	Killed	Injured	Killed	Injured	Killed	Injured	Killed	Injured
Drivers of motor vehicles	194	2 669	169	2 684	187	2 907	198	2 790
Motor cyclists	39	720	41	697	41	608	35	588
Passengers (any type)	115	1 389	93	1 509	95	1 480	94	1 455
Pedestrians	73	776	64	779	82	808	76	849
Pedal cyclists	14	388	11	363	11	309	13	341
Other	1	11	—	13	2	12	1	30
Total	436	5 953	378	6 045	418	6 124	417	6 053

Source: *VicRoads, Information Services Department*.

Public transport

Victoria's Public Transport Corporation through its constituent businesses, Met Trains, Met Tram, Met Bus, V/Line Passenger and V/Line Freight, provide the majority of Victoria's surface public transport. The Met services operate in suburban Melbourne while V/Line services operate in country Victoria.

Buses

Melbourne is serviced by 200 bus routes which operate throughout the entire metropolitan area. A total of 1,300 buses operate; 1,220 are privately owned and 80 are operated by Met Bus. The remaining Government operated bus services are to be privatised during 1998. The metropolitan bus network primarily acts as a connecting and feeder bus system to the rail and tram networks and to suburban shopping centres.

Bus services also operate in major urban centres and throughout country Victoria. A total of 300 buses provide services to these areas and inter-town services operate on routes which were previously rail connections.

In 1995-96 metropolitan buses travelled 65 million kilometres and carried 94 million passengers. The country Victorian services travelled 11 million kilometres and carried 11.4 million passengers.

Trains

Met Trains and V/Line Passenger provide rail passenger services in metropolitan and country Victoria. Increasing passenger patronage continued the recent trend, with 119.9 million passenger boardings during 1996–97. Metropolitan services carried 112.6 million passengers, a 3.2 per cent increase over 1995–96. Punctuality has improved with 92.4 per cent of peak period suburban trains running to time in 1996–97 compared with 89.5 per cent in 1995–96. Developments underway include the phased introduction of automated ticketing and the closure of Flinders Street rail yards with the associated development of secure stabling sidings in suburban areas. Country rail passenger services were improved by V/Line Passenger with a new daily Sprinter rail car service to Albury and a weekend Sprinter service to Echuca introduced, the first regular passenger train service to Echuca since 1981. Passenger services to Warrnambool and Shepparton are provided by private companies.

At 30 June 1996, V/Line had a total of 124 locomotives available for traffic and Met trains had 904 Electrical Multiple Unit carriages available for service. V/Line also operates a road transferable locomotive, primarily in the north of the State on lightly trafficked branch lines.

A number of steam locomotives are maintained for special services on the Victorian rail network by preservation groups. These locomotives can be seen operating over the network during the cooler months. Heritage rail services also operate at various sites throughout Victoria, including Maldon, Korumburra, and Queenscliff, with the well known 'Puffing Billy' narrow gauge steam railway located in the Dandenong Ranges at Belgrave, east of Melbourne. The Puffing Billy service will be extended to run from Belgrave to Gembrook before the end of the century.

The Victorian Government plans to privatise V/Line Passenger and V/Line Freight during 1998. Met trains are to be split into two separate businesses and also offered for sale.

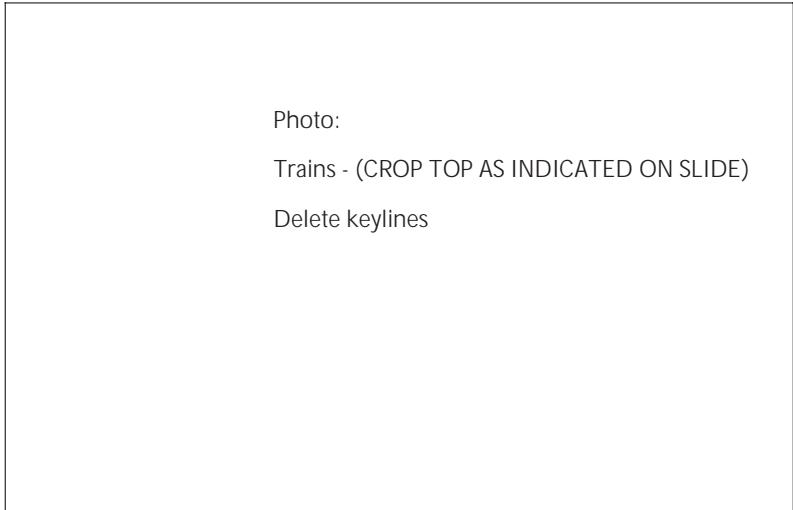


Photo:

Trains - (CROP TOP AS INDICATED ON SLIDE)

Delete keylines

Rail freight

V/Line freight carried a total of 8.19 million tonnes of freight during 1996–97, an increase of 19.0% over the total for the previous year. The major freight categories contributing to the increase were grain (up from 3,896,000 tonnes to 4,541,000 tonnes) and containers (from 1,116,000 tonnes to 1,904,000 tonnes). Much of the traffic increase is related to strong performances by the rural sector. Driver-only train operation has been expanded from passenger services to selected freight services, resulting in productivity improvements.

The National Rail Freight Corporation, which was established by the Federal and State Governments, consolidates the interstate rail freight operations of the existing government rail networks. It operates rail freight services over the main interstate rail freight corridors of mainland Australia. In Victoria, this constitutes the standard gauge routes towards Sydney and Adelaide and the broad gauge route servicing the steel traffic into and out of Long Island, near Hastings on Westernport Bay. A. Goninan and Co. has opened a new locomotive servicing facility at Spotswood to service the National Rail locomotive fleet.

Three freight forwarding companies have entered agreements with rail operators, including V/Line, and dedicated freight train services are operated on their behalf between Melbourne and a number of other State capitals.

Trams

Melbourne's tramway and light rail network is the fourth largest in the world and the largest outside Europe. Melbourne is the only Australian city to retain a comprehensive tramway network. The decision made in the 1960s by the Victorian Government to keep trams has been vindicated by the increasing use of the tramway network and the expansions to route mileage undertaken in recent years. Other cities across the world are re-instituting trams for both public transport and tourism purposes and trams retired from service on Melbourne streets are seen on some of these lines.

A modern fleet of 537 trams operate on the network of 240 km around Melbourne and suburbs. Refurbished, historic W class trams operate on selected tourist routes. A free city circle route utilising distinctively painted W class trams was commissioned during 1994 and now carries over three million passengers per year. The City Circle tram service was Melbourne's third most visited tourist attraction. Met Trams recorded 21,914,000 vehicle kilometres during 1996-97, carrying 115.4 million passengers. A new tram servicing depot was opened at Southbank during the year replacing an old depot on Kingsway, South Melbourne.

A restaurant tram service provided by three converted W class trams travelling around inner Melbourne has proven a major tourism feature for many visitors to Melbourne and provided a special night out for many Melbourne residents.

Met Trams are to be split into two separate businesses prior to privatisation.

Heritage tramways operate for tourism purposes in the provincial centres of Bendigo and Ballarat, based on the remains of tramway services operated until 1971 by the State Electricity Commission. A tramway museum is located at Bylands, north of Melbourne.

Air

Victoria's main airport, Melbourne Airport, is located at Tullamarine, 22 kilometres north-west of Melbourne's Central Business District.

Melbourne Airport became a privately operated airport on 2 July 1997. The new operators, Australia Pacific Airports Corporation, are a majority Australian owned organisation with headquarters based in Melbourne.

Melbourne Airport is ranked one of the world's top 3 airports in 1997's International Air Transport Associations Airport Monitor (survey of 50,000 international passengers) and ranked in the top 10 since 1993. It is Australia's only major single terminal airport with domestic and international terminals under one roof making passenger transfers easier and reducing airline costs. There is no operating curfew and this benefits both international passenger and freight movements. The airport is also benefiting from the major roadway developments with the Western Ring Road work improving access to the airport from the Hume and Princes Freeways. The completion of the City Link project will improve access to the Airport from the south-eastern region.

Total passenger movements for financial year 1996-97 were 13,710,351; of which 2,421,221 were international passengers and 11,072,478 domestic. The remainder were transit passengers. Total growth in passenger numbers/movements for financial year 1996-97 was 2.2% and international passenger growth was 8.2% on the previous year. There are 27 international airlines using the airport with approximately 180 international arrivals per week.

Total freight for financial year 1996-97 was 340,000 tonnes, of which 192,000 tonnes was international. Total growth for financial year 1996-97 was 2.6% and international freight growth was 3.6% on the previous year.

The airport is building on the development program of the last five years that has seen the major expansion of the common user international terminal and the domestic terminal operated by Ansett and Qantas. The recent completion of the multilevel carpark has increased short term parking from 1,800 spaces to approx. 3,100. The airport now offers undercover casual parking with covered walkways linked directly to the terminals. A pay-on-foot system has been established to handle the increased number of cars and has the feature of being able to process credit card transactions. This feature itself required technology new to Australia. The project was completed in September 1997.

Extension of the southern freight apron was completed in the second part of this year and has increased freight handling ability from four to five B747 freighters simultaneously. Major extension of the Qantas terminal has begun which involves building an additional Qantas domestic concourse, developing a new concrete apron area to handle an additional 10 aircraft, developing a new terminal services building for holding emergency generators and water chilling facilities and repositioning the elevated road and roadwork on the main intersection.

Development of the new BOC Cargo Services freight terminal is underway and the 4,500 square metre facility is expected to be completed early next year. (BOC Cargo Services is an independent operator.) This is the first of many expected developments in the high potential freight area.

16.4 MELBOURNE AIRPORT (TULLAMARINE)—PASSENGER MOVEMENTS

	1991-92	1992-93	1993-94	1994-95	1995-96	1996-97
Domestic and regional passenger movements ('000)	8 442	8 467	9 012	10 064	10 829	11 072
International passenger movements ('000)	1 754	1 789	1 872	1 931	2 095	2 421
Total freight and mail (tonnes)	172 230	183 218	199 527	226 675	233 284	340 000
Regular public transport aircraft movements	110 530	119 862	118 503	128 637	133 980	n.y.a.

Source: Department of Transport and Regional Development.

Ports and shipping

The four major commercial ports serving Victoria are located at Melbourne, Geelong, Portland and Hastings. Significant reforms to commercial port operations were announced in 1995, leading to the sale during 1996 of the ports of Geelong and Portland and the port of Hastings has subsequently been sold. The port of Melbourne will remain in Government ownership under the auspices of the Melbourne Port Corporation. Responsibility for management of channels, lights, etc. in the four commercial ports is undertaken by the Victorian Channels Authority. Responsibility for administration and enforcement of shipping, navigation and general safety regulation resides with the Marine Board of Victoria, together with responsibility for the Victorian Marine Pollution Contingency Plan.

Reforms introduced at Victorian ports have led to reductions in port authority charges of approximately 20%.

Cargo and freight services

The port of Geelong serviced 461 vessels during 1996-97 with total trade of 9,724,000 mass tonnes, an increase of almost 21% over 1995-96. The main products shipped from Geelong were petroleum products, grain (primarily bulk), woodchips and pine logs. Crude oil and petroleum products were the major cargoes landed at Geelong, followed by fertiliser (raw materials and manufactured) and steel and aluminium raw materials.

At Hastings, 175 vessels docked during 1996-97 for a total trade of 5,388,000 mass tonnes, 6 per cent more than in 1995-96. Major products shipped from the port are crude oil, liquefied petroleum gas and steel. Steel and unleaded petrol are landed at the port. Small increases in the volume of steel and petroleum products handled by the port has led to the increase in tonnages handled at the port of Hastings.

The largest single commodity handled through the port of Portland is woodchips for export, followed by alumina (imports), grain (export) and aluminium ingot (export). The port comprises six berths, one of which is dedicated to the nearby aluminium smelter. Growth areas for the port of Portland include woodchips, grain, fertilisers and product for Portland Aluminium. The year 1997 saw the largest single shipment from Portland of 57,750 tonnes of barley on board the M.V. Naravino. The year also saw a record tonnage through the port of 3,653,542 tonnes with a monthly record for throughput in April 1997 of 502,244 tonnes. The record is attributed to a strong performance by the Wimmera grain growing area as much of the output from the Wimmera is shipped from Portland.

The level of container traffic into and out of the port of Melbourne makes it the largest container and general cargo port in Australia, with a total of 2,882 ship visits in 1996-97. In 1996-97, container trade represented 11,859,000 mass tonnes or 64% of total trade through the port (in mass tonne terms).

Photo:

Container truck

Delete keylines

16.5 VICTORIAN PORTS, SHIP VISITS AND TRADE

Port	1993-94		1994-95		1995-96		1996-97	
	Ship visits	Mass tonnes '000						
Geelong	425	8 241	363	7 213	406	8 050	461	9 724
Hastings	265	7 629	251	6 943	202	5 083	175	5 388
Melbourne	2 581	14 054	2 692	15 789	2 767	17 844	2 882	18 563
Portland	187	3 129	173	2 710	189	3 189	244	3 654
Total	3 458	33 053	3 479	32 655	3 564	34 166	3 762	37 329

Source: Melbourne Ports Corporation, TNT GeelongPort Pty Ltd, TNT WesternPort Pty Ltd, Port of Portland Pty Ltd.

The commercial operations of the port of Melbourne include South Wharf, Victoria Dock, Appleton Dock, Swanson Dock, Yarraville and Maribyrnong berths, Webb Dock, Gellibrand and Breakwater Piers at Williamstown and Station Pier at Port Melbourne. Victoria Dock east of no. 22 berth, and South Wharf east of no. 19 berth, will be closed due to the building of the City Link bridge. It is anticipated that this part of the port will ultimately form part of the Docklands development.

16.6 MAJOR PRODUCTS HANDLED THROUGH THE PORT OF MELBOURNE, 1996-97

	mass tonnes
Foodstuffs	2 419 107
Crude oil and petroleum products	2 839 813
Chemicals	873 198
Iron and steel	498 665

Source: Melbourne Ports Corporation.

Passenger services

Passenger services are largely confined to the overnight Bass Strait service operated from Station Pier. Station Pier also serves as the passenger terminal for cruise liners visiting Melbourne, with 12 visiting during 1996-97 and 15 during 1995-96. A total of 169 passenger ship movements occurred in the port of Melbourne during 1996-97.

COMMUNICATIONS

Communications technology and the communications industry have undergone significant change over the past decade, with the extension of satellite technology, the growth of personal computer usage and, in the last two years, the advent of the Internet and World Wide Web.

Recent studies of personal and household use of computers and communications technologies (such as the mobile phone) confirm Australia's reputation as a major user of new technologies.

Household use of computers has grown from 23% of Australian households in February 1994 to 30% of households in February 1996, an increase of 500,000 households purchasing or paying for a computer. The growth was particularly high in non-urban areas where household usage grew from 16% to 24%.

16.7 HOUSEHOLDS USING COMPUTERS/DEDICATED GAMES MACHINES BY REGION, AUSTRALIA

	February 1994			February 1996		
	Capital cities %	Remainder of Australia %	Total Australia %	Capital cities %	Remainder of Australia %	Total Australia %
Computers	26.8	16.3	22.9	32.8	24.0	29.5
Dedicated games machines	18.7	16.1	17.8	16.8	14.5	15.9
Total number of households in Australia ('000)	3 999	2 389	6 388	4 173	2 472	6 645

Source: *Household Use of Information Technology, Australia* (8128.0).

The household use of peripheral information technology equipment has also increased. Usage of CD-ROM drives grew significantly (29%) between 1994 and 1996. Rapid growth was also evident in the use of facsimile machines which more than doubled from 4% to 9% over the same period.

16.8 USE OF PERIPHERAL IT EQUIPMENT BY HOUSEHOLDS BY REGION, AUSTRALIA

	February 1994			February 1996		
	Capital cities %	Remainder of Australia %	Total Australia %	Capital cities %	Remainder of Australia %	Total Australia %
Printers	81.7	74.4	79.7	81.6	84.2	82.4
Character or image readers and scanners	5.7	8.2	*6.3	7.2	5.9	6.8
CD-ROM	11.6	15.1	12.5	42.0	39.9	41.3
Modems	20.1	8.3	17.0	24.8	20.2	23.4
Facsimile machines	5.1	3.2	4.4	10.7	8.1	9.7
Other equipment(a)	15.9	11.6	14.8	17.1	12.1	15.6
Total number of households where a computer is used ('000)	1 071	389	1 460	1 368	593	1 960

(a) Includes additional keyboards, add-on storage, etc.

Source: *Household Use of Information Technology, Australia* (8128.0).

Domestic computer access

In 1996, there were a total of 262,000 households using their computers to access the Internet, with an additional 141,000 households using their computers for e-mail. The largest proportion of internet users was in the 26–40 age group (38%).

Of the persons who used computer games and accessed educational products over 50% were in the age group 5–17 years. People in this age group were also the largest users of computers for work relevant to studies (46%).

Fifty per cent of persons who accessed 'adult' entertainment products and other on-line services and who conducted work relevant to business and employment via home-based computer, were in the 26–40 year age group.

16.9 COMPUTER ACTIVITIES OF PERSONS BY AGE, AUSTRALIA, FEBRUARY 1996

Activity	Age group (years)					Total % '000
	5-17 %	18-25 %	26-40 %	41-55 %	Over 55 %	
Playing computer games	50.4	13.3	19.9	13.3	3.1	100.0 2 346
Using mainly educational products	58.9	7.3	17.4	13.0	3.4	100.0 1 052
Doing work relevant to studies	45.8	20.6	21.1	11.2	*1.4	100.0 1 620
Doing work for the home-based business	*0.4	*3.6	43.3	38.6	14.1	100.0 422
Doing work relevant to my business (excl. home-based)	*0.1	*8.9	47.2	36.3	*7.6	100.0 379
Doing work relevant to my employment (excl. own business)	*0.8	16.6	44.1	35.8	*2.8	100.0 833
Doing other paid work from home via computer	—	*1.4	*26.4	*36.1	*36.1	100.0 23
Keeping personal or family records	*3.3	12.6	41.5	33.3	9.3	100.0 900
'Adult' entertainment products	—	*20.9	*55.5	*23.7	—	100.0 28
Electronic mail	*4.4	*14.3	49.3	24.5	*7.5	100.0 141
Accessing the Internet	*10.7	18.0	37.6	28.0	*5.7	100.0 262
Accessing other on-line services and databases	*9.5	*17.4	50.6	*14.9	*7.5	100.0 116
Other	*6.0	12.9	26.9	35.7	18.5	100.0 263

Source: *Household Use of Information Technology, Australia (8128.0)*.

Communication technology

Answering machines have extensive usage throughout Australia, with units in 25% of households. Usage in the capital cities (30%) was significantly higher than that in the remainder of Australia where the proportion was 19%.

Whilst nearly 97% of households had a telephone connected, more than 52% of households did not own or pay for other technologies, such as mobile phones, faxes or pagers.

16.10 HOUSEHOLDS OWNING/PAYING FOR SELECTED COMMUNICATIONS TECHNOLOGIES BY REGION, AUSTRALIA, FEBRUARY 1996

	Capital cities %	Remainder of Australia %	Total Australia %
Facsimile machine	10.7	8.1	9.7
Mobile phone	27.5	18.5	24.1
Car phone	4.3	4.3	4.3
Cordless phone	15.0	10.8	13.4
Answering machine	29.5	18.6	25.4
Pager	3.1	1.4	2.4
Voice mail	4.0	*1.2	3.0
Pay TV(a)	4.1	*1.3	3.0
Other	*0.5	*0.6	0.5
None of the above	47.3	61.0	52.4
Telephone connected	97.8	95.2	96.8
Total number of households ('000)	4 173	2 472	6 645

(a) Pay TV services are not widely available in all areas of Australia.

Source: *Household Use of Information Technology, Australia (8128.0)*.

Media services

In 1993-94, there were 77 businesses providing television and radio services in Victoria, with total employees of 4,104. Gross income for radio and television businesses was \$884.6 million.

There were three public broadcasters in radio and two public broadcasters in television accounting for 40% and 33% respectively of total employment in radio and television.

Private broadcasters accounted for 88% of gross income from television broadcasting while 64% of gross income from radio broadcasting came from private broadcasters.

16.11 RADIO AND TELEVISION SERVICES, VICTORIA, 1993-94

Category	Businesses at June 30 no.	Employment at June 30 no.	Gross income \$m
Radio			
Private broadcasters	60	931	134.8
Public broadcasters	3	610	75.2
Total broadcasters	63	1 541	210.0
Television			
Private broadcasters	12	1 730	594.6
Public broadcasters	2	833	80.0
Total broadcasters	14	2 563	674.6
Total radio and television	77	4 104	884.6

Source: *Radio and Television Services, Australia* (8680.0).

Print media

In the area of print media, Victoria's two main daily newspapers, *The Age* and the *Herald-Sun*, have a joint average circulation of 778,000 per day (Monday to Friday), 878,000 for Saturday and 729,000 for Sunday. *The Herald-Sun* has the larger circulation with an average of 568,000 Monday to Friday, 518,000 on Saturday and 522,000 on Sunday.

Victoria also has a wide range of regional, metropolitan and community newspapers, together with a large number of special interest newspapers.

Postal services

The Australian Postal Corporation (Australia Post), has a charter under the Australian Postal Corporation Act 1989, to provide all Australians with a universal letter service. It is a Government Business Enterprise owned by the Commonwealth of Australia with revenue totalling \$2.9 billion in 1995-96.

As at 30 June 1996, Australia Post was Australia's seventh-largest employer with 32,040 full-time and 5,689 part-time staff. It services 7.92 million delivery points nationally. In 1995-96, Australia Post's 37 mail, 14 parcel and 233 delivery centres processed an average 16 million mail articles every working day. Australia Post has extended the price 'freeze' on the 45-cent standard letter (which was first applied in January 1992) until June 1998.

16.12 POSTAL ARTICLES HANDLED BY AUSTRALIA POST, VICTORIA

Period	Mail posted in Victoria (million)	
	Letters	Parcels
1990-91	1 016.2	21.5
1991-92	1 001.0	22.3
1992-93	1 030.5	24.3
1993-94	1 049.0	25.7
1994-95	1 114.8	28.2
1995-96	1 170.9	30.1
1996-97	1 315.6	31.1

Source: *Australian Postal Corporation*.

ENERGY REFORM IN VICTORIA

Electricity

The National Competition Policy, which encourages the opening up of industry to competitive forces, has created an impetus for the reform of industries throughout Australia. This underlies the reform of Victoria's electricity industry. In the Victorian electricity industry, competition now works at two main levels:

- generators compete against each other (and against parties able to manage demand) to sell power into the wholesale market ('the Pool')
- retailers compete against each other to supply contestable customers which will comprise the entire market by 2001. Contestable customers may also purchase energy from the Pool and bypass retailers.

Reform began with the State Government dividing the vertically integrated monopoly of the previous State Electricity Company of Victoria into transmission and distribution entities. The retail and distribution sectors are now fully disaggregated and privatised with five retail and distribution companies supplying franchise customers. There are now fourteen retailers operating in Victoria, (including the five previously Government owned entities). More are expected to join as the National Electricity Market (NEM) is phased into operation.

The first stage of the NEM (known as NEM1), commenced on 4 May 1997 allowing electricity trade across borders. The initial participants were Victoria, New South Wales and the Australian Capital Territory; with South Australia participating through the Victorian Market. When the full National Market commences South Australia will participate in its own right with Queensland and Tasmania to join later. It is expected that the full National Market will commence in the first half of 1998.

Generation has also been disaggregated into seven competing companies with the intention that the competitive pressures will reduce the wholesale price of electricity. Four of these generation companies, namely Loy Yang A, Loy Yang B, Yallourn and Hazelwood have been privatised.

Photo:

Electricity sub-station

Delete keylines

Two statutory corporations, PowerNet Victoria (PNV) and Victorian Power Exchange (VPX), have been established to operate the transmission system and the wholesale electricity market. PNV owns and maintains the high voltage transmission network. It has now been privatised. VPX is an independent non-profit organisation which operates the wholesale market and administers system security on behalf of the industry. The goal of VPX is to minimise the cost of electricity to Victoria by matching supply and demand under commercially competitive conditions, while maintaining security and integrity of supply. These key requirements are overseen by the Office of the Regulator General (ORG).

Gas Reform

A comprehensive reform of the Victorian gas industry is now underway. The objective of the reform process is to encourage the development of a fully competitive and integrated energy market in south-eastern Australia. The intention is that the industry will be restructured from the current State-owned monopoly. The key structural changes will include the unbundling of the distribution operations and separation of the retail operations currently performed by Gascor into three gas businesses each comprising a gas distributor and a gas retailer.

The three gas retailers—Kinetik Energy, Energy 21 and Ikon Energy will ultimately be able to compete for customers as and when they become contestable. The three gas distributors—Westar, Stratus and Multinet—will not be aligned with the retailer areas. The existence of overlapping retail and distribution boundaries requires each gas distributor to provide open access to its networks to the two gas retailers which operate the retail franchise in its territory. In addition, following the progressive introduction of contestability, gas distributors will be required to provide open access to their pipeline systems to any gas retailers wanting to sell gas to contestable customers.

The gas distributors and retailers have been operationally effective from July 1997. Legal establishment of all entities is expected in late 1997. The Government proposes to privatise these entities in 1998, however it is not committed to a fixed timetable.

The disaggregation of Gascor into gas retailers and gas distributors ends the monopoly supply and pricing of gas to Victorian consumers and will allow the new gas retailers to compete for consumers on the basis of price and service. It will also allow gas distributors and other distribution businesses to compete for new reticulation projects.

In addition to the unbundling of distribution and retail operations, it is also proposed to introduce a gas spot market administered by an independent system operator, VENCorp, through which system participants will be able to buy and sell gas and thereby maximise their commercial position. Under this proposal, VENCorp will be responsible for balancing the transmission system and managing the spot market. The Gas Transmission Company (GTC) will retain ownership and responsibility for the maintenance of the gas transmission system. The spot market is also intended to provide price transparency, giving existing market participants and potential new participants the information to enable them to better investment, consumption and operational decisions.

In terms of production, the majority of gas supplied to Victoria is from fields owned by ESSO/BHP Petroleum in the Gippsland Basin. The balance is supplied by Cultus Petroleum from gas reserves in the Otway Basin. Victorian consumers are likely to obtain a more diverse gas supply through proposed pipeline developments and connections to NSW. These include the construction of an Albury Wagga transmission pipeline interconnect by GTC and East Australian Pipeline Limited and the possible construction of the Eastern Gas Pipeline between Longford and Wilton, south west of Sydney, by BHP Petroleum and Westcoast Energy Australia.

Source: Department of Premier.

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Department of Treasury and Finance

Gas and Fuel Annual Report

Appendix: Historical Statistics

The following tables provide a historical summary of some statistics relating to Victoria. The full series was published in the 1996 edition of the Victorian Year Book.

A blank space indicates that the figures are not available. A line drawn across a column between two consecutive figures indicates a break in the continuity of the series.

DEMOGRAPHY

POPULATION, VICTORIA

Year	Population at 31 December(a)(b)				Population of Melbourne at 30 June(b)(d)(f)
	Males no.	Females no.	Persons no.	Masculinity(c)	
1841	14 391	6 025	20 416	238.85	4 479
1851	58 235	39 254	97 489	148.35	23 143
1861	320 888	218 876	539 764	146.61	139 916
1871	407 628	338 822	746 450	120.31	215 991
1881	457 782	416 183	873 965	110.00	288 169
1891	606 395	551 977	1 158 372	109.86	486 620
1901	608 436	601 464	1 209 900	101.16	501 580
1911	668 818	671 075	1 339 893	99.66	612 190
1921	765 306	785 421	1 550 727	97.44	800 520
1931	896 429	907 141	1 803 570	98.82	995 600
1941	964 619	981 806	1 946 425	98.25	1 114 900
1951	<u>1 150 009</u>	<u>1 149 529</u>	<u>2 299 538</u>	<u>100.04</u>	<u>1 330 800</u>
1961	<u>1 485 348</u>	<u>1 469 951</u>	<u>2 955 299</u>	<u>101.05</u>	<u>1 984 936</u>
1971(e)	1 815 332	1 818 511	3 633 843	99.83	2 575 000
1972	1 841 114	1 845 022	3 686 136	99.79	2 616 400
1973	1 863 086	1 867 738	3 730 824	99.75	2 652 700
1974	1 887 222	1 892 365	3 779 587	99.73	2 685 800
1975	1 896 188	1 904 468	3 800 656	99.57	2 711 200
1976	1 905 656	1 918 285	3 823 941	99.34	2 723 700
1977	1 918 212	1 934 377	3 852 589	99.16	2 740 800
1978	1 927 106	1 947 395	3 874 501	98.96	2 757 200
1979	1 937 866	1 962 127	3 899 993	98.76	2 771 000
1980	1 951 449	1 979 206	3 930 655	98.60	2 787 400
1981	1 969 349	1 999 049	3 968 398	98.51	2 834 200
1982	1 991 532	2 021 155	4 012 687	98.53	2 862 000
1983	2 012 443	2 042 055	4 054 498	98.55	2 890 100
1984	2 033 611	2 064 029	4 097 640	98.53	2 913 300
1985	2 055 418	2 085 003	4 140 421	98.58	2 938 000
1986	2 075 900	2 106 300	4 182 200	98.58	2 967 800
1987	2 102 800	2 132 200	4 234 900	98.62	3 004 500
1988	2 132 200	2 163 100	4 295 200	98.57	3 043 600
1989	2 157 600	2 190 600	4 348 200	98.49	3 086 600
1990	2 183 000	2 217 700	4 400 700	98.44	3 126 900
1991	2 199 400	2 238 100	4 437 500	98.27	3 155 700
1992	2 211 500	2 253 900	4 465 400	98.12	3 177 900
1993	2 216 200	2 262 600	4 478 800	97.95	3 187 900
1994	2 225 600	2 274 700	4 500 400	97.84	3 196 700
1995	2 243 300	2 296 500	4 539 800	97.68	3 218 100
1996	2 262 500	2 318 800	4 581 300	97.57	3 283 300

(a) All estimates have been corrected for discrepancies disclosed by the various censuses up to the census of 1996. (b) Figures for 1961 and subsequent years include full-blood Aboriginals. (c) Number of males per 100 females. (d) Figures shown for the population of Melbourne from 1921 to 1960 relate to the population of the City of Melbourne and adjoining municipal areas within boundaries defined for census purposes at the respective censuses of 1921, 1933, 1947, and 1954. From 1961 onwards, the figures relate to the population within an area referred to as the Melbourne Statistical Division. (e) From 1971 onwards, figures are estimated resident population. (f) The Melbourne Statistical Division boundary was extended in 1991. A further slight change in the MSD boundary occurred in 1995. The figures from 1991 onwards have been amended to reflect that change.

MARRIAGES, DIVORCES, BIRTHS, DEATHS(a)(b), VICTORIA

Year	Marriages		Divorces(c)		Births		Deaths		Infant mortality	
	Number	Crude rate	Decrees granted	Crude rate	Number	Crude rate	Number	Crude rate	Number	Crude rate(d)
1841	406	26.44	—	—	618	40.25	319	20.78		
1851	1 023	11.78	—	—	3 049	35.12	1 165	13.42		
1861	4 434	8.23	1	—	23 461	43.53	10 522	19.52		
1871	4 693	6.38	7	0.01	27 382	37.24	9 918	13.49	3 114	113.72
1881	5 896	6.81	9	0.01	27 145	31.33	12 302	14.20	3 119	114.90
1891	8 780	7.66	99	0.09	38 505	33.60	18 631	16.26	4 861	126.24
1901	8 406	6.99	83	0.07	31 008	25.77	15 904	13.22	3 192	102.94
1911	11 088	8.40	214	0.16	33 026	25.01	15 216	11.52	2 269	68.70
1921	13 676	8.90	389	0.25	35 591	23.16	16 165	10.52	2 582	72.55
1931	10 182	5.66	425	0.24	30 332	16.86	17 033	9.47	1 349	44.47
1941	20 898	10.81	842	0.44	34 406	17.80	20 522	10.62	1 246	36.21
1951	21 117	9.28	1 730	0.76	50 553	22.21	23 446	10.30	1 143	22.61
1961	21 264	7.27	1 257	0.43	65 886	22.52	24 500	8.37	1 173	17.80
1971	32 386	9.20	3 079	0.87	75 498	21.45	30 598	8.69	1 107	14.66
1972	31 206	8.52	3 664	1.00	71 713	19.59	29 937	8.18	1 048	14.59
1973	30 203	8.15	3 313	0.89	66 910	18.05	30 738	8.29	958	14.27
1974	29 708	7.91	4 465	1.19	66 052	17.60	30 973	8.25	989	14.94
1975	27 806	7.34	5 683	1.50	61 797	16.31	29 579	7.81	806	13.02
1976	28 760	7.55	16 633	4.36	60 531	15.88	30 884	8.10	702	11.57
1977	27 558	7.18	10 859	2.83	59 389	15.48	29 542	7.70	653	10.97
1978	27 178	7.03	10 820	2.80	58 687	15.19	29 206	7.56	616	10.47
1979	27 019	6.95	9 471	2.44	57 628	14.83	29 118	7.49	652	11.29
1980	27 724	7.08	9 207	2.35	58 022	14.82	29 453	7.53	592	10.17
1981	28 648	7.25	9 769	2.47	59 284	15.01	29 088	7.37	562	9.44
1982	28 851	7.23	11 266	2.82	59 876	15.00	30 694	7.68	641	10.69
1983	28 974	7.18	10 663	2.64	59 928	14.85	29 365	7.27	561	9.33
1984	28 931	7.10	10 501	2.57	59 485	14.59	29 532	7.24	525	8.78
1985	29 810	7.24	9 688	2.35	61 555	14.94	31 353	7.60	601	9.76
1986	29 390	7.06	9 670	2.32	60 162	14.46	30 175	7.20	517	8.60
1987	29 682	7.05	9 626	2.29	61 507	14.61	31 549	7.50	498	8.10
1988	30 687	7.20	10 250	2.40	62 134	14.58	30 726	7.20	486	7.80
1989	30 624	7.10	10 253	2.40	64 002	14.80	32 357	7.50	414	6.50
1990	30 120	6.90	10 406	2.40	66 970	15.30	30 986	7.10	523	7.80
1991	28 535	6.5	11 134	2.5	65 438	14.8	31 216	7.1	428	6.5
1992	28 429	6.4	10 533	2.4	65 766	14.8	31 951	7.2	366	5.6
1993	27 418	6.1	10 935	2.4	64 049	14.3	31 197	7.0	347	5.4
1994	26 974	6.0	11 228	2.5	63 974	14.3	32 353	7.2	327	5.1
1995	26 607	5.9	11 838	2.6	62 591	13.9	32 425	7.2	308	4.9
1996	26 074	5.7	12 491	2.8	61 143	13.5	32 726	7.2	308	5.0

(a) The Registration Act providing for the legal registration of births, deaths, and marriages in Victoria was passed in 1853. Prior to this date Victorian vital statistics were obtained from parish and church records which were regarded as being incomplete for statistical purposes. For this reason, the numbers of vital events and their corresponding rates for this period must be treated with caution. In particular, it is thought that in the year in which the new registration system was introduced (1853) both births and deaths were understated, the correct totals in each case would probably have exceeded 5,000. Figures for 1966 and subsequent years include particulars of full-blood Aboriginals. From 1972 onwards figures for births and deaths are compiled on a State of usual residence basis. (b) The rates are referred to as crude rates because they do not take into account important factors such as age structure, sex, and marital status of the population. (c) The Commonwealth Family Law Act 1975 came into operation on 5 January 1976 repealing the Matrimonial Causes Act 1959. (d) Number of deaths under one year per 1,000 registered live births.

POPULATION INCREASE, VICTORIA

Year(a)	Natural increase (b)(c)(d)	Apparent net migration(d)	Total increase(c)	Rate of natural increase(d)(e)	Rate of apparent migration(d)(f)	Rate of population growth(g)
1841	299	9 826	10 125	19.47	639.96	98.39
1851	1 884	19 443	21 327	21.70	223.93	28.00
1861	12 939	-11 409	1 530	24.01	-21.17	0.28
1871	17 464	5 061	22 525	23.75	6.88	3.11
1881	14 843	517	15 360	17.13	0.60	1.79
1891	19 874	4 770	24 644	17.34	4.16	2.17
1901	15 104	-1 417	13 687	12.55	-1.18	1.14
1911	17 810	20 675	38 485	13.49	15.66	2.96
1921	19 426	3 392	22 818	12.64	2.21	1.49
1931	13 299	-2 334	10 965	7.39	-1.30	0.61
1941	13 884	18 995	31 507	7.18	9.83	1.65
1951	27 107	35 249	62 356	11.91	15.49	2.79
1961	41 386	15 310	56 696	14.14	5.23	1.96
1971	44 900	9 479	54 379	12.79	2.70	1.56
1972	41 776	10 517	52 293	11.41	2.87	1.44
1973	36 172	8 516	44 688	9.76	2.30	1.21
1974	35 079	13 684	48 763	9.34	3.64	1.31
1975	32 218	-11 149	21 069	8.50	-2.94	0.56
1976	29 647	-6 362	23 285	7.78	-1.67	0.61
1977	29 847	-1 199	28 648	7.78	-0.31	0.75
1978	29 481	-7 569	21 912	7.63	-1.96	0.57
1979	28 510	-3 018	25 492	7.34	-0.78	0.66
1980	28 569	2 093	30 662	7.30	0.54	0.79
1981	30 196	7 779	37 975	7.65	1.97	0.97
1982	30 346	16 715	46 061	7.70	4.20	1.16
1983	29 378	14 538	43 916	7.40	3.60	1.07
1984	30 596	11 390	41 986	7.60	2.80	1.01
1985	30 269	14 359	44 628	7.40	3.50	1.07
1986	29 094	13 219	42 313	7.10	3.20	0.99
1987	30 555	17 535	48 090	7.30	4.20	1.16
1988	30 585	22 829	52 414	7.30	5.40	1.25
1989	31 613	26 910	58 523	7.40	6.30	1.35
1990	33 692	26 184	59 876	7.80	6.10	1.35
1991	34 950	8 660	43 610	8.0	2.0	0.95
1992	33 441	-2 769	30 672	7.6	-0.6	0.69
1993	33 621	-20 478	13 143	7.6	-4.6	0.30
1994	32 474	-21 197	11 277	7.3	-4.7	0.25
1995	31 253	-5 653	25 600	7.0	-1.3	0.57
1996	28 148	11 790	39 938	6.2	2.6	0.88

(a) For the period September 1939 to June 1947 troop movements were excluded and deaths of defence personnel, whether in Australia or overseas, included. Thus, for these years, the figures for natural increase and net migration do not equal the total increase figure. (b) Excess of live births (where mother's State of usual residence is Victoria) over deaths (where deceased's State of usual residence is Victoria). (c) Figures for 1966 and subsequent years include full-blood Aboriginals. (d) See footnote (a) to preceding table. For reasons stated there, the natural increase and apparent net migration, together with their corresponding rates for this period, must be treated with caution. (e) Excess of births over deaths per 1,000 of the estimated mean population. (f) Apparent net migration per 1,000 of the estimated mean population. (g) Figures from 1991 onwards are calculated based on estimated resident population (ERP) as at 30 June.

INDUSTRIAL CONDITIONS

INDUSTRIAL DISPUTES AND TRADE UNIONS, VICTORIA

Year	Industrial disputes during year(a)			Trade unions(b)			Total '000
	Number of disputes	Workers involved(c) no.	Working days lost '000	Number of separate unions	Males '000	Females '000	
1912				151	109.9	6.7	116.6
1921	20	6 280	213	159	161.1	34.9	196.0
1931	10	4 643	28	150	166.1	37.9	204.0
1941	22	20 117	139	146	215.8	54.5	270.3
1951	41	27 219	42	156	346.1	87.3	433.4
1961	91	52 747	72	156	385.8	101.0	486.8
1971	362	380 100	689	170	453.3	168.8	622.1
1972	377	338 200	638	167	463.3	191.9	655.2
1973	431	189 800	781	168	486.7	198.0	684.8
1974	476	611 000	2 387	172	503.2	211.9	715.0
1975	424	570 900	1 222	171	507.4	219.0	726.5
1976	322	647 300	1 420	172	504.2	216.4	720.5
1977	244	120 700	586	172	504.7	224.4	729.1
1978	303	227 000	468	174	510.1	225.6	735.7
1979	325	661 500	1 486	174	514.5	235.5	750.0
1980	315	538 300	1 115	173	523.6	246.6	770.1
1981	376	404 900	1 236	173	522.9	248.8	771.7
1982	266	117 200	368	175	533.4	256.7	790.1
1983	231	103 700	258	174	529.1	259.1	788.2
1984	223	72 400	188	179	545.5	260.5	806.0
1985	262	130 900	356	177	568.0	290.5	858.5
1986	260	146 600	382	176	586.9	299.5	886.4
1987	230	86 200	281	166	578.4	297.3	875.7
1988	191	207 700	363	166	589.6	311.9	901.5
1989	182	174 300	348	160	598.9	332.3	931.2
1990	165	169 100	391	157	598.5	316.7	915.2
1991	155	135 500	209	146	573.5	338.5	912.0
1992	114	598 800	586	114	522.0	305.0	827.0
1993	114	200 900	257	89	482.4	288.2	770.6
1994	109	52 200	87	71	455.7	268.9	724.5
1995	110	79 000	126	61	420.8	248.8	669.7
1996	98	121 100	218	57	434.4	245.6	680.0

(a) Refers only to disputes involving a stoppage of work of 10 staff-days or more in the establishments where the stoppage occurred. Disputes not settled at the end of a year are included as new disputes in the figures for the following year. Statistical collection commenced in 1913. (b) From 1985 the reporting date was changed from 31 December to 30 June. Published figures show total membership from that date. Prior to 1985 a mixture of total and financial membership was used. (c) Includes persons stood down from work at the establishments where the stoppages occurred but were not themselves parties to the dispute.

EDUCATION

PRIMARY AND SECONDARY EDUCATION(a), VICTORIA

Year	Schools no.	Pupils			Teachers		
		Males no.	Females no.	Persons no.	Males no.	Females no.	Persons no.
GOVERNMENT SCHOOLS							
1861	671	28 120	23 225	51 345			
1871	988	71 247	59 898	131 145	1 194	1 123	2 317
1881	1 757	118 996	112 427	231 423	1 894	2 420	4 314
1891	2 233	131 282	122 187	253 469	1 898	2 964	4 862
1901	1 967	110 481	104 631	215 112			
1911	2 059	121 275	113 491	234 766	2 218	3 354	5 572
1921	2 455	136 127	127 391	263 518	2 438	4 845	7 283
1931	2 747	155 046	141 444	296 490	3 906	5 476	9 382
1941	2 697	134 822	122 448	257 270	4 421	4 921	9 342
1951	2 119	130 704	118 045	248 749	4 672	4 616	9 288
1961	2 222	233 153	206 587	439 740	7 665	8 811	16 476
1971	2 197	312 203	281 730	593 933	13 847	16 365	30 212
1972	2 194	315 876	286 738	602 614	14 400	17 664	32 064
1973	2 179	316 391	289 253	605 644	15 336	18 879	34 215
1974	2 161	316 621	292 022	608 643	15 694	19 326	35 020
1975	2 161	321 124	296 988	618 112	16 621	21 107	37 728
1976	2 164	323 499	301 208	624 707	17 557	22 986	40 543
1977	2 162	323 285	303 032	626 317	18 184	23 711	41 895
1978	2 152	321 896	301 713	623 609	18 588	24 393	42 981
1979	2 155	316 430	297 989	614 419	18 629	24 134	42 763
1980	2 158	311 702	294 445	606 147	18 391	23 810	42 201
1981	2 149	306 510	288 532	595 042	18 206	23 563	41 769
1982	2 140	301 469	283 312	584 781	18 362	23 494	41 856
1983	2 124	300 900	281 134	582 034	19 096	23 799	42 895
1984	2 118	296 050	276 563	572 613	19 480	24 611	44 091
1985	2 118	288 595	270 169	558 764	19 008	24 868	43 876
1986	2 114	281 668	264 468	546 136	18 130	23 729	41 859
1987	2 091	276 789	261 106	537 895	18 003	24 683	42 686
1988	2 064	273 623	258 984	532 607	17 636	23 528	41 164
1989	2 059	270 695	257 005	527 700	17 189	24 423	41 612
1990	2 038	270 210	256 366	526 576	16 496	24 442	40 938
1991	2 029	274 646	258 740	533 386	16 023	24 497	40 520
1992	2 013	274 786	259 123	533 909	16 162	25 633	41 795
1993	1 934	270 409	256 227	526 636	14 475	23 076	37 551
1994	1 731	266 621	253 707	520 328	13 172	21 462	34 634
1995	1 711	263 854	250 951	514 805	12 636	21 471	34 106
1996	1 700	265 204	251 858	517 062	12 414	21 630	34 045

For footnotes see end of table.

...continued

PRIMARY AND SECONDARY EDUCATION(a), VICTORIA — *continued*

Year	Pupils			Teachers			
	Schools no.	Males no.	Females no.	Persons no.	Males no.	Females no.	Persons no.
NON-GOVERNMENT SCHOOLS							
1861	211	1 968	3 160	5 128			
1871	1 062	15 421	18 710	34 131	677	1 435	2 112
1881	645	16 665	17 397	34 062	430	1 123	1 553
1891	759	17 941	19 262	37 203	466	1 529	1 995
1901	862	21 289	24 251	45 540	385	2 017	2 402
1011	587	25 936	29 957	55 893	337	1 638	1 975
1921	486	31 615	36 433	68 048	402	1 661	2 063
1931	505	31 682	38 660	73 342			2 286
1941	518	38 410	42 898	31 308			2 744
1951	479	49 414	52 900	102 314			3 272
1961	548	81 462	84 403	165 865	1 195	3 665	4 860
1971	571	93 546	97 669	191 215	2 332	6 473	8 805
1972	570	94 368	97 787	192 155	2 496	6 639	9 135
1973	569	95 135	98 302	193 437	2 644	6 944	9 588
1974	571	96 525	99 895	196 420	2 822	7 237	10 059
1975	578	97 646	101 193	198 839	2 995	7 530	10 525
1976	586	98 598	102 485	201 083	3 239	7 484	10 723
1977	584	99 391	103 927	203 318	3 543	7 813	11 356
1978	600	101 304	105 856	207 160	3 812	8 070	11 882
1979	617	103 696	107 445	211 141	4 136	8 520	12 656
1980	633	106 159	109 966	216 125	4 293	8 741	13 034
1981	632	108 734	112 877	221 611	4 606	9 209	13 815
1982	641	111 732	115 471	227 203	4 877	9 561	14 438
1983	659	115 369	118 802	234 171	5 191	10 053	15 244
1984	734	119 277	122 462	241 739	5 554	11 409	16 963
1985	734	121 230	123 946	245 176	5 736	11 646	17 382
1986	733	123 568	126 828	250 396	5 926	11 834	17 760
1987	729	124 992	128 094	253 086	6 047	12 000	18 047
1988	730	127 039	129 673	256 712	6 087	12 437	18 324
1989	719	127 652	129 755	257 407	6 029	12 381	18 410
1990	715	127 774	130 012	257 786	6 014	12 523	18 537
1991	696	127 132	128 995	256 127	6 034	12 423	18 457
1992	687	126 439	127 274	253 713	6 060	12 341	18 401
1993	683	125 214	125 747	250 961	5 642	10 586	16 227
1994	679	126 128	126 738	252 866	5 710	10 950	16 661
1995	675	127 571	127 901	255 472	5 846	11 113	16 959
1996	679	129 555	129 838	259 393	5 941	11 355	17 295

(a) Care should be taken in interpreting the data in this table. Comparability between years and between government and non-government schools is affected by differences in the organisation of grades policy on student advancement flows from secondary to vocational education and the recruitment and employment of teachers. In addition the census date has differed in some years. From 1980 the census has been at 1 July on the first school day thereafter.

UNIVERSITY EDUCATION(a), VICTORIA

Enrolments(b)

Year	Males	Females	Full-time	Part-time(c)	Total(d)
1861	100	—	100	—	100
1871	122	—	122	—	122
1881	368	2	370	—	370
1891	582	70	652	—	652
1901	425	159	584	—	584
1911	944	276	1 139	81	1 220
1921	2 003	651	2 423	231	2 654
1931	2 419	900	2 278	1 041	3 319
1941	3 288	1 335	2 987	1 636	4 623
1951	6 340	1 894	4 973	3 261	8 234
1961	8 707	3 107	7 554	4 260	11 814
1971	19 363	9 633	21 149	7 847	28 996
1972	20 359	10 592	22 559	8 392	30 951
1973	20 975	11 338	23 154	9 159	32 313
1974	22 010	12 847	24 993	9 864	34 857
1975	22 792	13 882	26 104	10 570	36 674
1976	23 464	14 923	26 992	11 395	38 387
1977	24 484	16 193	28 064	12 613	40 677
1978	24 522	17 436	27 512	14 446	41 958
1979	24 646	18 319	27 229	15 736	42 965
1980	24 659	19 220	27 815	16 064	43 879
1981	24 370	19 849	27 946	16 273	44 219
1982	23 850	20 300	28 110	16 040	44 150
1983	23 406	20 897	28 115	16 188	44 303
1984	23 383	21 570	28 434	16 519	44 953
1985	23 163	22 531	28 502	17 192	45 694
1986	23 284	23 644	29 268	17 695	46 963
1987	22 990	23 776	30 339	16 427	46 766
1988	24 286	27 552	34 418	17 420	51 838
1989	25 736	32 683	40 117	13 322	58 419
1990	27 065	34 612	42 942	18 735	61 677
1991	46 954	56 834	65 927	26 486	103 788
1992	52 313	66 889	73 757	32 860	119 202
1993	72 385	85 527	94 224	49 059	157 912
1994	75 436	88 418	96 641	52 148	163 854
1995	76 992	90 606	99 061	52 006	167 528
1996	79 593	95 445	104 713	51 709	175 038

(a) There were four universities in Victoria in 1989: the University of Melbourne, opened 1855; Monash University, opened 1961; La Trobe University, opened 1967, and Deakin University, opened 1977. All institutions now fall under the Unified National System, and can no longer be split into Universities and Colleges of Advanced Education. A number of institutional amalgamations and name changes occurred in the 12 months prior to the commencement of the 1992 academic year. The policy of merging Colleges of Advanced Education with Universities was completed by the end of 1993. (b) 1855 to 1956—gross enrolments in courses; 1957 to 1971—net enrolments (students in two courses counted once). (c) Includes external students. (d) From 1991 onwards, total enrolments includes full-time, part-time and external enrolments.

PUBLIC EXAMINATIONS, VICTORIA

Year	Matriculation			Attempted to pass fully	Passed fully	Percentage who passed
	Attempted to pass fully	Passed fully	Percentage who passed			
1861		29		29	20	69.0
1871		276		276	122	44.2
1881		911		911	409	44.9
1891		1 293		1 293	543	42.0
1901		1 136		1 136	511	45.0
Junior Commercial			Junior Public(a)(b)			Senior Public(a)
	Attempted to pass fully	Passed fully	Percentage who passed	Attempted to pass fully	Passed fully	Percentage who passed
1911	49	15	30.6	2 003	888	44.3
Intermediate(b)			Leaving(c)			Matriculation(a)
	Attempted to pass fully	Passed fully	Percentage who passed	Attempted to pass fully	Passed fully	Percentage who passed
1921	3 831	1 346	35.1	2 238	827	37.0
1931	7 805	3 412	43.7	4 699	1 877	39.9
1941	7 378	4 488	60.8	4 959	2 247	45.3
1951	8 573	5 662	66.0	5 211	3 543	68.0
1961	23 621	15 589	66.0	15 636	9 493	60.7
1971	—	—	—	—	—	—
1972	—	—	—	—	—	—
1973	—	—	—	—	—	—
1974	—	—	—	—	—	—
1975	—	—	—	—	—	—
1976	—	—	—	—	—	—
1977	—	—	—	—	—	—
1978	—	—	—	—	—	—
1979	—	—	—	—	—	—
1980	—	—	—	—	—	—
1981	—	—	—	—	—	—
1982	—	—	—	—	—	—
1983	—	—	—	—	—	—
1984	—	—	—	—	—	—
1985	—	—	—	—	—	—
1986	—	—	—	—	—	—
1987	—	—	—	—	—	—
1988	—	—	—	—	—	—
1989	—	—	—	—	—	—
1990	—	—	—	—	—	—
1991	—	—	—	—	—	—
1992	—	—	—	—	—	—
1993	—	—	—	—	—	—
1994	—	—	—	—	—	—
1995	—	—	—	—	—	—
1996	—	—	—	—	—	—
1997	—	—	—	—	—	—

(a) Matriculation was first held in 1855 primarily as a qualification for university entrance. 1906: title changed to senior and junior public examinations; 1917: title changed to School Leaving Certificate; 1944: title changed to Matriculation; 1970: title changed to Higher School Certificate (HSC); 1987: title changed to Victorian Certificate of Education (VCE) – a combination of school based and external assessment. (b) 1963 to 1967 Intermediate was a subject examination (one in which the candidate is presented with a certificate listing the subjects he or she passed, i.e. the candidate does not pass or fail the examination as a whole). The only available figures show the total number of entries (persons) regardless of the number of subjects each is sitting for and have been excluded. Includes candidates with Headmaster's Certificates which were accepted as satisfying the requirements of the examination. 1967 was the last year in which the examination was held. (c) Since 1964 known as a subject examination. In 1971 the Leaving examination commenced to be phased out. A large number of schools conducted their own 5th year secondary examinations.

HEALTH

PUBLIC HOSPITALS(a), VICTORIA

Year	Number of hospitals(a)	Number of beds	Patients treated	
			Inpatients	Outpatients
1861	19	926	7 610	17 596
1871	31	1 820	13 087	49 983
1881	37	2 350	16 828	—
1890-91	42	2 672	19 800	41 166
1900-01	50	3 231	23 442	68 579
1910-11	55	3 897	36 292	76 328
1920-21	60	4 845	50 517	93 661
1930-31	65	4 597	73 028	171 465
1940-41	67	7 827	109 716	281 278
1950-51	93	9 112	165 481	415 495
1960-61	138	12 579	270 840	581 023
1970-71	148	13 865	381 786	949 271
1971-72	147	14 103	406 034	1 018 363
1972-73	147	14 243	419 976	1 116 442
1973-74	147	14 285	417 646	1 244 610
1974-75	147	14 474	432 613	1 356 169
1975-76	148	14 109	455 670	1 642 596
1976-77	149	14 411	467 216	1 747 849
1977-78	149	14 192	484 849	1 812 586
1978-79	149	13 993	500 788	2 004 382
1979-80	149	13 887	503 434	2 064 730
1980-81	150	13 879	528 703	2 166 211
1981-82	148	13 746	522 388	2 033 771
1982-83	167	14 589	541 021	2 034 503
1983-84	165	14 290	537 988	1 988 355
1984-85	164	14 265	525 815	(b) 4 495 095
1985-86	165	(c) 13 283	530 357	4 651 262
1986-87	(d) 165	13 208	527 545	4 713 212
1987-88	157	13 437	586 762	5 119 734
1988-89	155	13 388	r616 406	5 321 920
1989-90	154	13 362	636 597	5 258 005
1990-91(e)	156	13 526	658 341	10 315 584
1991-92	150	13 192	685 639	9 791 351
1992-93	148	12 869	715 524	9 621 860
1993-94	138	12 154	766 619	6 867 313
1994-95	125	12 153	836 741	6 710 811
1995-96	(f) 91	12 332	872 312	7 170 011

(a) This table provides data relating to general hospitals, special hospitals (those that have accommodation for specific cases only or for women and/or children exclusively and the Cancer Institute which was established in 1949), sanatoria, auxiliary hospitals, convalescent hospitals, and hospitals for the aged. The table excludes mental hospitals, psychiatric and informal hospitals, (except those hospitals recognised as acute care hospitals under the medicare agreement), intellectual deficiency training centres and schools, founding homes and hospitals, bush nursing centres, and convalescent homes. Also excluded are hospitals operated by the Department of Veteran's Affairs and other Commonwealth authorities. (b) From 1984-85 the number represents outpatient attendances. The outpatient attendance for 1983-84 was 4,719,606. (c) From 1985-86 the number of beds represents the average number over the year which were staffed and available. (d) Subsequently affected by amalgamations, closures and inclusion of psychiatric hospitals recognised as acute care hospitals under the medicare agreement. (e) From 1990-91 the number of outpatients treated represents non-inpatient occasions of service. (f) Several previously independent hospitals have been amalgamated. If individual locations are counted the number is 119.

NOTE: The following factors should be considered when interpreting data from 1948-49 onwards:

i) All years cover a full twelve month period, with the exception of 1948-49 (9 months) and 1954-55 (15 months).

ii) The source of data is the Health Department of Victoria or its predecessors.

iii) Figures for most years in the 1950s are slightly understated due to the failure of some hospitals to submit statistical returns.

iv) The basis of reporting of public hospital data changed with effect from 1 July 1993 as a result of the introduction of new funding and reporting arrangements under the National Health Information Agreement and the 1993 Medicare Agreement. These revised arrangements resulted in the exclusion from reporting arrangements of nine psychiatric hospitals (680 beds). The effect of this and other definitional changes was to create an artefactual decrease of 2.5% in the number of inpatients reported in 1993-94 compared with 1992-93.

The reporting of outpatient activity was also affected by a number of reporting changes involving the exclusion of approximately 2,665,000 domiciliary and other occasions of service funded through Commonwealth programs.

AGRICULTURE

The scope of the Agricultural Census has changed over time. In recent years, the ABS began to gradually exclude from the statistics those establishments which made only a small contribution to overall agricultural production. Commencing in 1976-77, only those establishments with an Estimated Value of Agricultural Operations (EVAO) of \$1,500 or more were included. In 1981-82, the EVAO criterion was increased to \$2,500. Further changes followed, the most recent being in respect of 1993-94 and 1994-95 when the EVAO was actually reduced from \$22,500 to \$5,000.

NUMBER OF ESTABLISHMENTS WITH AGRICULTURAL ACTIVITY AND LAND UTILISATION, VICTORIA

Year ended 31 March	Number of establishments with agricultural activity	Area utilised for -				Total area occupied ha
		Crops(a) ha	Sown pasture(b) ha	Native pasture ha	Balance of estab- lishments ha	
1840-41		1 299				
1850-51		21 182				
1860-61	13 653	156 728	4 711			1 423 294
1870-71	31 842	280 383	59 482			3 856 916
1880-81	49 637	626 781	103 193			7 341 459
1890-91	36 013	822 304	95 199			
1900-01	39 381	1 260 246	84 133			
1910-11	66 651	1 599 347	401 123	11 752 267	936 809	15 269 937
1920-21	77 148	1 816 839	425 442	11 586 595	971 653	15 583 899
1930-31	74 537	2 717 734	499 630	9 511 034	1 522 777	15 299 565
1940-41	72 382	1 807 810	1 464 694	10 851 711	1 839 426	16 727 453
1950-51	69 698	1 760 878	2 890 658	8 332 936	1 565 948	15 421 956
1960-61	69 623	1 823 002	4 065 886	6 435 670	2 129 421	15 351 488
1970-71	68 555	1 698 536	8 679 487	3 590 595	860 777	15 760 305
1971-72	67 714	1 937 207	8 445 265	(d)	4 596 653	15 883 652
1972-73	66 890	1 925 984	6 456 131	(d)	6 585 790	15 771 423
1973-74	65 327	1 980 007	7 116 201	2 367 415	4 020 961	15 484 584
1974-75	62 926	1 775 306	6 978 276	2 639 361	3 833 233	15 226 176
1975-76	58 468	1 850 509	6 695 640	2 638 675	3 959 580	15 144 404
1976-77	48 994	1 948 004	6 548 831	2 620 846	3 381 084	14 498 765
1977-78	48 310	2 173 876	6 500 493	2 508 402	3 471 222	14 653 993
1978-79	48 855	2 214 935	6 616 540	2 353 142	3 255 912	14 440 529
1979-80	49 616	2 246 656	6 224 275	2 880 678	3 383 531	14 735 140
1980-81	49 399	2 183 811	6 194 508	2 615 994	3 671 517	14 665 830
1981-82	48 608	2 184 048	6 007 165	2 651 256	3 604 907	14 447 376
1982-83	47 862	2 233 735	5 598 282	3 109 132	3 247 932	14 189 081
1983-84	46 508	2 654 844	5 513 233	2 846 580	3 240 301	14 254 958
1984-85	45 884	2 568 594	5 657 241	2 630 763	3 337 879	14 194 477
1985-86	<u>44 936</u>	<u>2 527 743</u>	<u>5 754 325</u>	<u>2 150 437</u>	<u>3 751 352</u>	<u>14 183 857</u>
1985-86	32 981	2 476 590	5 355 608	1 913 289	3 406 499	13 151 986
1986-87	34 583	2 316 605	5 820 200	2 262 104	2 728 250	13 127 159
1987-88	32 688	2 158 720	5 969 540	2 023 797	2 933 483	13 085 540
1988-89	32 035	1 989 604	6 457 854	1 909 669	2 738 460	13 095 587
1989-90	33 306	1 989 352	6 503 860	1 863 198	2 705 715	13 062 125
1990-91	<u>32 620</u>	<u>2 063 031</u>	<u>5 545 873</u>	<u>2 339 559</u>	<u>2 756 364</u>	<u>12 704 827</u>
1991-92	31 358	2 039 208	5 661 520	2 208 042	2 465 631	12 374 401
1992-93	<u>31 251</u>	<u>2 257 666</u>	<u>5 434 605</u>	<u>2 280 141</u>	<u>2 298 007</u>	<u>12 270 419</u>
1993-94	37 330	2 317 245	6 122 470	2 123 571	2 454 047	13 017 333
1994-95	37 070	2 296 299	(c)	(c)	10 423 128	12 719 427
1995-96	36 904	2 350 422	5 237 439	1 301 558	3 878 856	12 768 275

(a) Commencing with season 1960-61 the area of pasture cut for hay or seed has been excluded from the area of crops.

(b) Includes oats, barley, and lucerne sown for grazing. (c) Information not collected. (d) Native pasture included in balance of establishment.

LIVESTOCK AND PASTORAL PRODUCTION, VICTORIA

Year ended 31 March	Livestock				Greasy wool production (a) '000 tonnes	Milk production for all purposes '000 kilolitres	Butter production (factory and farm) '000 tonnes	Cheese production (factory and farm) '000 tonnes
	Horses	Cattle	Sheep	Pigs				
1840-41	2 372	50 837	782 283					
1850-51	21 219	378 806	6 032 783	9 260				
1860-61	76 536	722 332	5 780 896	61 259	11			
1870-71	167 220	721 096	10 761 887	130 946	23			
1880-81	275 516	1 286 267	10 360 285	241 936	34			
1890-91	436 469	1 782 881	12 692 843	282 457	29			
1900-01	392 237	1 602 384	10 841 790	350 370	41	721	25	2
1910-11	472 080	1 547 569	12 882 665	333 281	58	894	32	2
1920-21	487 503	1 575 159	12 171 084	175 275	52	930	29	2
1930-31	379 872	1 429 920	16 477 995	281 245	67	1 427	50	4
1940-41	318 441	1 922 336	20 412 362	397 945	85	2 036	71	8
1950-51	186 415	2 216 253	20 011 933	237 127	99	2 026	60	23
1960-61	64 462	2 863 799	26 619 849	318 523	146	2 713	91	20
1970-71		5 060 711	33 761 487	519 779	195	4 087	136	36
1971-72		5 456 589	29 495 847	589 992	201	3 973	131	39
1972-73		5 464 467	24 105 497	585 227	172	3 945	128	49
1973-74		5 839 690	25 787 551	424 248	155	3 917	128	48
1974-75		6 192 417	26 409 930	383 144	166	3 745	119	45
1975-76		5 868 435	25 395 140	392 834	138	3 518	108	52
1976-77	45 529	5 104 278	21 925 450	396 753	121	3 212	89	52
1977-78	51 561	4 572 412	22 021 356	401 197	130	2 898	90	64
1978-79	63 001	4 134 356	22 750 116	389 976	139	3 248	84	81
1979-80	66 241	4 252 272	24 400 065	421 735	147	3 155	69	95
1980-81	66 748	4 312 123	25 486 993	400 179	146	3 065	68	80
1981-82	63 689	4 121 248	25 340 923	406 253	148	3 028	66	94
1982-83	60 659	3 408 275	22 748 412	386 902	132	3 164	75	95
1983-84	56 480	3 487 000	24 632 399	404 085	142	3 425	94	91
1984-85	53 925	3 575 683	26 470 688	409 538	142	3 540	96	93
1985-86	50 765	3 719 705	26 892 261	431 680	r167	3 575	91	97
1985-86	39 733	3 382 899	25 715 626	426 814	r171	..	..	..
1986-87	38 926	3 478 030	26 585 784	431 832	r132	3 692	90	102
1987-88	40 646	3 473 528	26 997 009	437 161	r142	3 649	82	103
1988-89	39 853	3 508 637	28 066 553	422 538	r167	3 792	83	115
1989-90	41 000	3 646 000	29 268 000	428 000	r171	3 787	91	103
1990-91	39 558	3 631 353	27 493 905	403 171	r161	3 908	93	105
1991-92	36 897	3 574 182	24 781 940	430 665	r145	4 118	94	123
1992-93	36 061	3 689 211	23 552 217	424 546	r145	4 456	107	128
1993-94	39 814	4 189 709	23 438 704	459 661	r125	4 967	119	144
1994-95	(b) 14 121	4 284 627	21 360 840	438 613	r138	5 113	112	147
1995-96	n.a.	4 395 911	21 974 000	458 482	129	5 622	120	164

(a) Includes dead and fellmongered wool and wool exported on skins. (b) Horses used for breeding only.

WHEAT, OATS AND BARLEY FOR GRAIN, VICTORIA

Year ended 31 March	Wheat			Oats			Barley		
	Area ha	Production tonnes	Yield per hectare tonnes	Area ha	Production tonnes	Yield per hectare tonnes	Area ha	Production tonnes	Yield per hectare tonnes
1840-41	785	1 372	1.75	332	489	1.47	121	204	1.69
1850-51	11 538	15 136	1.31	2 027	1 806	0.89	851	910	1.07
1860-61	65 256	94 163	1.44	34 939	47 785	1.37	1 669	1 902	1.14
1870-71	114 998	78 120	0.68	60 423	40 588	0.67	7 950	5 462	0.69
1880-81	395 494	264 736	0.67	54 264	42 863	0.79	27 774	24 241	0.87
1890-91	463 431	347 034	0.75	89 455	89 255	1.00	35 512	35 643	1.00
1900-01	816 382	485 725	0.59	146 775	173 859	1.18	23 817	27 567	1.16
1910-11	970 473	947 455	0.98	158 913	175 978	1.11	21 322	30 399	1.43
1920-21	929 104	1 074 160	1.16	179 533	197 897	1.10	38 022	56 603	1.49
1930-31	1 861 637	1 464 588	0.79	150 148	125 079	0.83	35 417	44 977	1.27
1940-41	1 081 616	367 993	0.34	226 300	47 614	0.21	75 939	26 920	0.35
1950-51	1 107 008	1 394 414	1.26	213 357	163 910	0.77	87 856	102 287	1.16
1960-61	1 081 160	1 839 413	1.70	337 880	374 954	1.11	125 167	175 050	1.40
1970-71	760 423	1 004 288	1.32	399 227	466 603	1.17	269 087	318 368	1.18
1971-72	1 040 169	1 797 280	1.73	329 477	449 423	1.36	295 812	390 858	1.32
1972-73	1 087 377	1 249 303	1.14	254 656	238 227	0.93	277 085	213 587	0.77
1973-74	1 257 938	1 405 367	1.11	271 155	232 740	0.85	221 804	285 358	1.28
1974-75	1 140 653	2 091 303	1.83	197 807	186 023	0.94	242 952	319 358	1.31
1975-76	1 073 130	1 578 505	1.47	281 730	337 165	1.19	344 306	444 600	1.29
1976-77	1 103 099	1 779 550	1.61	241 290	309 016	1.28	366 237	401 827	1.09
1977-78	1 270 263	1 496 693	1.17	228 378	268 546	1.17	418 407	358 632	0.85
1978-79	1 337 441	2 998 471	2.24	290 782	446 197	1.53	365 438	519 099	1.42
1979-80	1 456 901	3 249 550	2.23	255 737	390 300	1.52	325 356	494 106	1.51
1980-81	1 431 042	2 538 004	1.77	218 682	321 664	1.47	302 777	418 049	1.38
1981-82	1 321 674	2 466 794	1.87	245 148	305 997	1.25	314 909	459 426	1.46
1982-83	1 326 574	393 975	0.30	212 939	97 614	0.46	278 217	74 554	0.27
1983-84	1 613 929	3 971 328	2.46	323 706	494 824	1.53	403 439	758 362	1.88
1984-85	1 522 621	2 666 338	1.75	228 293	343 203	1.50	485 505	637 723	1.31
1985-86	<u>1 508 077</u>	<u>2 250 379</u>	<u>1.49</u>	<u>211 543</u>	<u>300 025</u>	<u>1.42</u>	<u>388 631</u>	<u>475 814</u>	<u>1.22</u>
1985-86	1 487 831	2 224 941	1.50	203 630	290 471	1.43	378 467	463 811	1.23
1986-87	1 363 605	2 794 559	2.05	214 766	355 875	1.66	265 362	443 852	1.67
1987-88	1 025 737	1 882 392	1.84	216 239	325 205	1.50	366 241	529 496	1.45
1988-89	930 923	1 691 363	1.82	188 922	276 081	1.46	349 608	544 833	1.56
1989-90	952 317	1 961 360	2.10	188 552	330 414	1.75	388 719	696 032	1.79
1990-91	<u>911 483</u>	<u>1 492 998</u>	<u>1.60</u>	<u>177 059</u>	<u>301 141</u>	<u>1.70</u>	<u>463 004</u>	<u>650 607</u>	<u>1.41</u>
1991-92	664 097	1 150 396	1.73	182 833	300 423	1.64	533 939	897 941	1.68
1992-93	<u>821 219</u>	<u>2 015 137</u>	<u>2.50</u>	<u>222 867</u>	<u>403 765</u>	<u>1.81</u>	<u>551 458</u>	<u>1 116 306</u>	<u>2.00</u>
1993-94	779 895	2 021 886	2.60	185 840	362 006	1.95	639 493	1 386 229	2.20
1994-95	821 755	944 200	1.15	147 738	200 605	1.36	492 251	448 147	0.91
1995-96	853 432	1 921 268	2.25	186 972	391 651	2.09	627 519	1 341 658	2.14

MAIZE FOR GRAIN, HAY AND POTATOES, VICTORIA

Year ended 31 March	Maize for grain			Hay			Potatoes		
	Area ha	Production tonnes	Yield per hectare tonnes	Area ha	Production tonnes	Yield per hectare tonnes	Area ha	Production tonnes	Yield per hectare(a) tonnes
1840-41	—	—	—	—	—	—	61	305	5.00
1850-51	10	—	—	5 490	21 308	3.88	1 148	5 703	4.97
1860-61	668	636	0.95	36 794	146 526	3.98	10 053	78 498	7.81
1870-71	410	509	1.24	66 037	186 657	2.83	15 793	129 627	8.21
1880-81	716	1 252	1.75	101 032	305 405	3.02	18 596	131 337	7.06
1890-91	4 191	14 582	3.48	167 156	576 892	3.45	21 779	207 432	9.52
1900-01	3 800	15 347	4.04	203 195	688 635	3.39	15 571	125 102	8.03
1910-11	8 155	24 947	3.06	336 969	1 313 153	3.90	25 456	165 933	6.52
1920-21	9 773	27 075	2.77	539 607	2 016 711	3.74	25 369	174 383	6.87
1930-31	6 567	17 600	2.68	516 945	1 631 675	3.16	27 353	176 123	6.44
1940-41	6 225	17 856	2.87	272 335	589 550	2.16	17 885	220 044	12.30
1950-51	1 655	4 742	2.87	225 594	908 943	4.03	21 239	141 628	6.67
1960-61	1 208	4 346	3.60	520 526	2 375 435	4.56	15 650	183 721	11.74
1970-71	535	1 578	2.95	512 437	2 494 736	4.87	14 150	303 901	21.48
1971-72	375	1 919	5.12	636 408	3 001 701	4.72	13 986	306 707	21.93
1972-73	495	1 506	3.04	516 798	1 975 143	3.82	13 120	286 990	21.87
1973-74	654	1 890	2.89	625 726	2 967 388	4.74	12 474	254 021	20.36
1974-75	543	1 912	3.52	505 609	2 016 529	3.99	13 010	282 547	21.72
1975-76	526	2 515	4.78	487 554	1 858 060	3.81	10 940	244 467	22.35
1976-77	432	1 710	3.96	517 992	2 004 050	3.87	9 892	243 625	24.63
1977-78	505	1 848	3.66	380 091	1 251 562	3.29	12 147	303 433	24.98
1978-79	513	1 994	3.89	509 550	2 012 410	3.95	11 256	279 613	24.84
1979-80	575	2 850	4.96	411 812	1 615 035	3.92	13 077	333 614	25.51
1980-81	568	3 002	5.29	497 327	1 894 298	3.81	13 702	348 950	25.47
1981-82	476	2 357	4.95	556 335	1 982 371	3.56	13 668	354 197	25.91
1982-83	602	2 449	4.07	348 329	1 064 904	3.06	13 520	291 380	21.55
1983-84	860	5 023	5.84	717 592	3 031 995	4.23	13 497	362 379	26.85
1984-85	1 224	6 303	5.15	386 759	1 516 426	3.92	14 922	379 074	25.40
1985-86	1 091	5 048	4.63	425 182	1 648 310	3.88	14 192	366 971	25.86
1985-86	1 073	4 999	4.66	390 348	1 524 463	3.91	14 078	365 472	25.96
1986-87	637	3 207	5.03	483 382	1 932 324	4.00	13 195	364 319	27.61
1987-88	1 328	5 503	4.14	379 938	1 459 806	3.84	14 458	398 175	27.54
1988-89	250	1 445	5.78	485 530	1 922 512	3.96	13 020	368 307	28.29
1989-90	282	1 041	3.70	491 856	1 966 239	4.00	13 319	368 409	27.70
1990-91	347	2 023	5.83	486 231	1 924 902	3.96	14 058	376 739	26.80
1991-92	362	2 953	8.16	556 086	2 047 385	3.68	13 602	368 777	27.11
1992-93	355	2 763	7.78	586 189	2 429 251	4.14	11 955	309 192	25.86
1993-94	233	1 674	7.18	492 298	1 990 940	4.04	12 005	322 147	26.84
1994-95	695	5 135	7.39	433 894	1 649 206	3.80	10 135	279 876	27.61
1995-96	1 143	6 807	5.96	560 796	2 208 815	3.94	11 457	335 649	29.30

(a) Yield per hectare – planted.

MANUFACTURING

MANUFACTURING ESTABLISHMENTS, VICTORIA

Year	Manufacturing establishments no.	Employment no.	Value of -			
			Wages and salaries paid \$m	Output \$m	Production \$m	Land, buildings plant and machinery \$m
1851	83					
1861	531	4 395				
1871	1 740	19 569				9
1881	2 488	43 208				16
1891	3 141	52 225				30
1901	3 249	66 529				25
1911	5 126	111 948	18	83		37
1920-21	6 532	140 743	43	212	74	71
1930-31	8 199	126 016	43	187	79	142
1940-41	9 121	237 636	100	419	178	184
1950-51	13 504	316 792	326	1 350	551	415
1960-61	17 173	387 430	776	3 332	1 418	1 642
				Turnover \$m	Value added \$m	
1970-71	—	—	—	—	—	—
1971-72	11 408	450 206	1 800	8 055	3 328	
1972-73	11 735	455 029	2 045	9 078	3 738	
1973-74	12 070	469 838	2 524	10 669	4 546	
1974-75(a)	8 924	432 851	2 961	11 730	5 131	
1974-75(b)	2 834	5 727	17	100	48	
1975-76	8 873	417 107	3 287	13 220	5 765	
1976-77	8 735	409 196	3 650	15 040	6 629	
1977-78	8 571	396 722	3 831	16 175	6 905	
1978-79	8 546	394 964	4 102	18 228	7 377	
1979-80	8 902	397 313	4 563	21 233	8 505	
1980-81	8 726	391 801	5 032	23 856	9 440	
1981-82	8 916	388 872	5 757	27 208	10 578	
1982-83	8 392	349 679	5 950	27 747	10 649	
1983-84	8 404	354 409	6 059	30 081	11 779	
1984-85	8 499	357 989	6 551	33 436	13 154	
1985-86	..	..	..	..	..	..
1986-87	9 109	356 992	7 443	39 970	15 621	
1987-88	9 858	367 603	8 302	45 577	n.a.	
1988-89	9 771	367 376	8 855	51 463	n.a.	
1989-90	9 729	343 703	9 186	54 249	22 571	
1990-91(a)	8 872	307 589	9 111	55 575	n.a.	
1990-91(b)	3 692	8 107	144	703	n.a.	
1991-92(c)	12 668	298 484	8 967	53 342	n.a.	
1992-93(c)	11 692	292 159	9 108	55 668	21 688	
1993-94	n.a.	286 014	9 015	58 775	n.a.	
1994-95	n.a.	295 800	9 745	62 002	n.a.	
1995-96	n.a.	292 600	9 594	63 768	19 708	

(a) All manufacturing establishment owned by multi-establishment enterprises and single establishment manufacturing enterprises with four or more persons employed. Figures from 1975-76 to 1989-90 do not include data for single establishment enterprises with fewer than four persons employed. (b) Single establishment manufacturing enterprises with fewer than four persons employed.

(c) All Manufacturing establishments.

Note:

- This series of factory statistics has not always been compiled on the same basis. The definition of the unit classified, the industrial classification of manufacturing establishments, and the content of the returns have all changed during the period covered by the table.
- A June-July financial year was adopted in respect of 1916-17 (previously a calendar year was used). Within the very broad headings of various industrial classifications, differences in administrative practices and coverage were also responsible for minor differences. Revisions, when introduced, could not always be carried through to statistics for earlier years.

MANUFACTURING ESTABLISHMENTS, VICTORIA *continued*

- . Returns were first collected through municipal authorities and for the period 1902 to 1954 by the Victorian Police under the supervision of the Government Statist. Between 1955 and 1958 dispatch and receipt of returns by mail was progressively introduced and the involvement of the Police ceased.
- . As foreshadowed above, the series can be regarded as divisible into a number of series of varying time spans rather than as a continuous series. Between 1902 and 1967-68 the definition of the unit was treated unchanged, although a number of changes took place in the classification of the units during that period.
- . In 1968-69 the first of the integrated economic censuses was conducted of manufacturing, mining, electricity and gas, wholesale, and retail establishments. The integration of these economic censuses meant that, for the first time, they were being conducted on the basis of a common framework of reporting units and data concepts and in accordance with a standard industrial classification. For details see Victorian Year Book 1971, pages 368-89.
- . No Census of Manufacturing Establishments was conducted for the years ending 30 June 1971 and 30 June 1986.
- . From the 1975-76 Census of Manufacturing Establishments onwards, only a limited range of data (employment and wages and salaries) was collected from single establishment manufacturing enterprises with fewer than four persons employed. This procedure has significantly reduced the statistical reporting obligations of small businesses.
- . Further steps to reduce respondent burden were taken for the 1986-87 Manufacturing Census when single establishment enterprises with fewer than 20 employees were made subject to sampling. Those enterprises selected in the sample provided detailed information of employment, wages and salaries, turnover, stocks, expenses and goods produced. Establishments not subject to sampling provided less detailed information for employment, wages and salaries, turnover and goods produced.
- . From 1986-87 onwards, data relating to value added and fixed capital expenditure less disposals are only available triennially.

BUILDING

NEW BUILDINGS COMPLETED, VICTORIA

Year	Houses		Other residential buildings		Value of all buildings(a)(c)
	Number	Value(a) \$'000	Number(b)	Value(b) \$'000	
1950-51	21 194	88 560	333	1 368	104 280
1969-71	22 094	157 596	4 183	27 072	326 304
1970-71	25 179	278 109	12 087	85 717	667 966
1971-72	25 627	306 315	10 091	75 421	677 381
1972-73	28 260	372 099	9 923	82 668	809 900
1973-74(d)	27 067	419 669	10 054	101 311	910 481
1974-75	26 902	511 546	10 440	129 749	1 108 278
1975-76	26 135	610 160	8 174	129 924	1 374 470
1976-77	28 901	796 043	8 924	177 775	1 617 273
1977-78	26 471	832 184	7 018	157 315	1 696 045
1978-79	23 445	769 068	4 514	111 773	1 748 931
1979-80	22 617	785 744	4 323	110 680	1 805 977
1980-81(e)	(f)21 480	817 490	4 420	115 633	1 869 595
1981-82	19 960	870 526	4 530	132 148	2 075 133
1982-83	18 850	866 167	5 006	147 150	2 397 778
1983-84	25 800	1 205 396	5 030	176 244	2 557 736
1984-85	29 650	1 524 763	5 854	223 777	3 229 392
1985-86	29 970	1 741 000	6 499	292 748	3 974 083
1986-87	27 710	1 790 546	5 999	292 950	4 326 017
1987-88	27 670	1 979 120	4 813	253 666	5 019 862
1988-89	30 540	2 421 706	4 377	297 879	6 604 253
1989-90	31 750	2 758 174	2 629	179 625	7 065 692
1990-91	25 180	2 392 400	2 922	208 100	7 189 700
1991-92	22 401	2 026 835	2 865	215 695	5 790 503
1992-93	25 083	2 232 567	2 566	179 092	5 797 654
1993-94	27 118	2 475 300	3 209	249 900	5 821 700
1994-95	27 380	2 610 600	2 892	271 900	5 587 300
1995-96r	21 883	2 196 400	3 086	293 200	6 038 900
1996-97	17 613	1 956 000	5 727	661 600	6 093 800

(a) Excludes value of land. (b) Individual dwelling units. (c) Includes houses and flats. (d) Prior to 1973-74 additions and alterations to dwellings valued at \$10,000 or more were included in the figures. (e) There was a change in scope and methodology in 1980-81 with further modification in 1981-82. (f) From 1980-81 figures for houses are rounded to the nearest ten units.

MINING

MINERAL PRODUCTION, VICTORIA

Year	Gold		Coal		Brown coal		Net value of total mining and quarrying production \$'000
	Quantity gross oz	Value(a) \$'000	Quantity tonnes	Value(a) \$'000	Quantity tonnes	Value(a) \$m	
1851	212 899	1 703	—	—	—	—	—
1861	2 035 173	16 281	—	—	—	—	—
1871	1 368 942	10 950	—	—	—	—	—
1881	833 378	6 667	—	—	—	—	—
1891	576 399	4 611	23 200	39	—	—	—
1901	730 453	6 206	212 689	294	—	—	—
1911	504 000	4 278	664 359	598	—	—	—
1921	104 512	88	523 122	1 207	84 496	62	—
1931	43 637	513	580 512	724	2 229 674	494	2 825
1941	149 769	3 201	331 680	608	4 638 916	846	5 019
1951	66 063	2 047	150 114	1 201	7 961 825	5 510	5 938
1961	26 229	824	67 428	719	16 540 440	15 443	26 316

						Value added(b)	
	grammes						
1970-71	182 826	178	20	—	28 180 539	22 975	217 953
1971-72	193 556	214			23 630 467	25 706	283 445
1972-73	141 054	102			24 121 155	28 555	316 619
1973-74	67 941	81			26 354 577	31 532	389 313
1974-75	217 794	225			27 541 462	45 341	468 513
1975-76	105 582	343			29 211 090	52 871	512 919
1976-77	40 175	112			30 994 476	61 598	548 722
1977-78	9 238	35			30 492 186	73 183	636 873
1978-79	21 799	129			32 101 029	87 641	868 078
1979-80	41 088	456			32 896 281	101 480	1 091 266
1980-81	62 350	829			32 102 948	116 728	1 502 196
1981-82	87 392	853			37 566 541	147 485	1 689 879
1982-83	115 053	1 370			34 998 510	158 383	1 820 366
1983-84	187 472	1 725			34 004 878	145 997	2 241 016
1984-85	901 568	11 297			38 500 759	213 788	2 819 743
1985-86	1 271 669	17 901			35 468 473	245 688	3 069 722
1986-87	1 178 472	21 594			41 797 818	279 930	2 238 981
1987-88	1 634 374	32 868			43 480 844	312 031	2 605 549

	kilograms		'000 tonnes	n.a.
1988-89	2 713	44 700	47 953	354 064
1989-90	3 515	48 515	45 959	327 438
1990-91	4 862	70 947	49 389	344 343
1991-92	3 346	45 580	49 542	380 891
1992-93	3 993	n.a.	47 898	411 000
1993-94	3 984	n.a.	48 214	401 000
1994-95	4 370	n.a.	50 600	414 000
1995-96	4 838	n.a.	(c)54 281	n.a.

(a) Selling value at point sale of mine or quarry products less transport costs from mine or quarry to point of sale i.e. value of output at mine or quarry. Gold value excludes annual subsidy. (b) Net value of total production until 1968. Value added of mining and quarrying from 1968-69. (c) Excludes coal for briquettes.

TRANSPORT

RAILWAYS, TRAMWAYS AND BUS SERVICES, VICTORIA

Year(a)	Victorian Railways				Metropolitan Transit Authority(b)			
	Lines open for traffic kilometres	Kilometres run '000	Passenger journeys '000	Goods and livestock carried '000 tonnes	Tramways		Metropolitan buses	
					Kilometres run '000	Passenger journeys '000	Kilometres run '000	Passenger journeys '000
1871	444	1 477	—	—	—	—	—	—
1881	2 007	7 457	18 973	1 444	—	—	—	—
1891	4 448	19 714	57 996	4 497	14 758	48 045	—	—
1900	5 171	17 809	54 704	3 436	14 428	47 196	—	—
1911	5 678	21 436	95 207	5 047	19 220	84 294	—	—
1921	6 878	26 689	140 851	7 695	32 723	213 872	—	—
1931	7 607	27 290	141 212	6 197	35 697	173 854	364	1 225
1941	7 670	30 316	166 650	6 748	34 722	193 386	8 473	39 694
1951	7 562	23 936	147 177	7 660	34 294	238 709	12 273	67 442
1961	6 906	29 909	151 302	11 153	31 054	172 055	9 537	30 282
1971	6 705	33 949	142 486	12 691	23 978	109 779	n.a.	101 600
1972	6 700	33 175	137 794	11 795	23 759	101 962	n.a.	95 700
1973	6 687	33 057	113 150	11 475	24 443	104 719	n.a.	94 800
1974	6 684	33 345	114 648	11 370	23 873	109 368	n.a.	92 500
1975	6 658	33 876	117 720	11 057	23 840	111 077	n.a.	85 700
1976	6 653	33 818	109 669	10 803	24 235	106 126	n.a.	80 400
1977	6 578	33 489	102 654	10 971	24 166	102 886	n.a.	76 600
1978	6 364	32 013	97 654	11 120	24 185	101 296	n.a.	74 700
1979	6 185	30 856	93 323	11 190	24 191	101 070	n.a.	74 400
1980	6 184	30 795	88 911	13 453	23 547	98 889	n.a.	73 000
1981	5 870	30 614	88 473	12 721	24 062	99 700	n.a.	71 500
1982	5 812	31 136	(c)97 000	11 623	24 030	101 000	n.a.	73 200
1983	5 815	30 166	(d)98 000	8 570	24 201	101 300	n.a.	72 600
1984	5 718	31 205	98 800	10 786	24 400	102 100	n.a.	75 100
1985	5 643	30 288	102 300	11 872	24 000	109 400	n.a.	83 300
1986	5 421	29 809	105 900	10 512	24 000	112 400	n.a.	85 000
1987	5 087	28 399	109 800	10 615	24 000	113 300	n.a.	86 100
1988	4 977	27 435	105 600	10 901	23 800	115 600	n.a.	91 500
1989	4 874	26 826	111 500	9 950	24 300	118 400	n.a.	93 300
1990	4 883	26 576	114 100	10 250	20 200	95 600	n.a.	92 700
1991	4 867	25 639	112 900	9 659	22 295	107 700	n.a.	91 200
1992	4 795	24 328	114 500	8 492	22 587	112 000	n.a.	94 000
1993	4 795	25 643	111 300	9 646	21 380	100 900	n.a.	91 900
1994	4 795	25 977	(e)116 253	7 529	20 043	104 000	n.a.	(f)89 900
1995	4 605	(g)22 217	(h)112 000	(i)5 716	21 700	108 600	n.a.	92 100
1996	4 582	23 633	116 255	6 877	21 900	114 142	(j)6 464	(j)6 102
1997	4 582	24 910	119 928	8 186	21 914	115 389	(j)6 183	(j)6 051

(a) 1862 to 1870 and 1877 to 1884 year ended 31 December; 1871 six months ended 30 June; 1872 to 1875 and 1885 to 1996 year ended 30 June; 1876 eighteen months ended 31 December. (b) 1886 to 1915 Melbourne Tramway and Omnibus Company; 1916 to 1982 Melbourne and Metropolitan Tramways Board; 1983 to 1989 Metropolitan Transit Authority; 1990 Public Transport Corporation. The figures for metropolitan bus passenger journeys from 1971 to 1995 inclusive have been revised to include both private and public buses. Previously published data was for public buses only. The kilometres run data for the period 1971 to 1994 are unavailable. (c) Multimodal ticket system introduced and metropolitan component redefined to represent vehicle boardings rather than journeys (from 1982 onwards). (d) Estimated to nearest million only. (e) Non-metropolitan component redefined to represent vehicle boardings rather than journeys (from 1994 onwards). (f) In December 1993 the majority of bus services operated by the Public Transport Corporation were transferred to private contractors. (g) Excludes interstate passenger services (contracted to interstate rail authorities). (h) Excludes interstate passenger services and passenger services privately managed on the Shepparton and Warrnambool corridors. (i) Excludes interstate freight: management transferred to National Rail Corporation. (j) Public Transport Corporation buses only.

NEW MOTOR VEHICLES REGISTERED, VICTORIA

New motor vehicles registered during period(a)

Year	Cars and station wagons(b) no.	Other(c) no.	Total(d) no.	Motor cycles no.
1930-31				
1940-41	5 529	3 304	8 833	735
1950-51	36 692	19 432	56 124	5 442
1960-61	67 001	14 803	81 804	1 356
1970-71	109 829	18 703	128 532	8 218
1971-72	107 937	19 384	127 321	11 091
1972-73	110 660	21 754	132 414	11 778
1973-74	121 546	23 290	144 836	11 637
1974-75	133 163	26 073	159 236	8 770
1975-76	120 168	26 911	147 159	8 450
1976-77	117 794	28 551	146 345	7 645
1977-78	115 368	28 248	143 616	6 469
1978-79	122 961	24 258	147 219	7 148
1979-80	115 567	22 021	137 588	10 884
1980-81	114 699	23 921	138 620	14 450
1981-82	121 960	27 517	149 477	15 731
1982-83	123 834	26 686	150 520	13 153
1983-84	126 652	26 650	153 302	10 067
1984-85	143 279	29 562	172 841	9 878
1985-86	132 003	26 558	158 561	8 079
1986-87	107 862	20 411	128 273	5 294
1987-88	103 907	18 254	122 161	3 847
1988-89	119 216	22 278	141 494	4 219
1989-90	140 918	28 447	169 365	4 786
1990-91	108 444	13 068	126 014	4 502
1991-92	98 766	10 274	112 918	3 878
1992-93	106 215	17 675	123 890	4 528
1993-94	113 249	19 203	132 452	4 400
1994-95	127 644	22 467	150 111	5 347
1995-96	129 866	21 128	150 996	5 921
1996-97	140 137	22 123	162 260	6 133

(a) From 1924 to 1982 the data source was the Motor Registration Branch. The Road Traffic Authority has provided this information since 1982. (b) Excludes defence service vehicles. (c) Includes ambulances and hearses until 1970-71 inclusive. (d) Includes utilities, panel vans, trucks, truck-type vehicles, omnibuses, and from 1971-72 onwards, ambulances and hearses.

MOTOR VEHICLES ON REGISTER, VICTORIA

Motor vehicles on register at 30 June(a)

Year	Cars and station wagons(b) no.	Others(c) no.	Total(d) no.	Motor cycles no.	Drivers' and riders' licences in force 30 June no.	Net revenue collected by Road Traffic Authority \$'000
1930-31	116 568	28 028	144 596	23 635	228 051	2 212
1940-41	148 437	84 725	233 162	23 572	365 205	3 785
1959-51	263 714	147 049	410 763	33 637	575 753	7 024
1960-61	625 183	201 132	826 315	18 422	1 032 431	22 538
1970-71	1 122 460	235 739	1 358 199	28 912	1 566 396	66 480
1971-72	1 170 100	239 600	1 409 700	35 700	1 634 118	73 581
1972-73	1 231 100	250 500	1 481 600	42 200	1 711 808	80 116
1973-74	1 307 000	264 600	1 571 600	48 800	1 856 910	90 708
1974-75	1 382 700	280 600	1 663 300	52 600	1 885 874	115 378
1975-76	1 445 800	286 900	1 732 700	52 000	1 957 056	145 401
1976-77	1 479 200	298 900	1 778 100	51 100	2 032 520	172 382
1977-78	1 544 900	318 300	1 863 200	52 300	2 016 063	204 107
1978-79	1 591 500	328 200	1 919 700	54 300	2 072 172	218 683
1979-80	1 580 100	326 200	1 906 300	54 000	2 120 469	223 871
1980-81	1 632 500	339 200	1 971 700	64 200	2 181 714	235 035
1981-82	1 731 200	366 400	2 097 500	74 300	2 255 439	270 704
1982-83	1 796 500	381 600	2 178 100	79 600	2 318 698	263 420
1983-84	1 859 700	400 400	2 260 100	81 700	2 369 622	312 649
1984-85	1 936 800	417 400	2 354 300	83 400	2 472 792	304 587
1985-86	1 972 900	422 200	2 395 000	81 800	2 588 163	310 520
1986-87	2 010 200	434 700	2 444 900	84 500	2 590 358	324 170
1987-88	2 064 700	440 400	2 505 100	70 100	2 696 706	330 704
1988-89	2 076 200	440 900	2 517 100	68 100	2 791 312	309 610
1989-90	2 137 800	446 400	2 584 200	67 900	2 875 289	311 858
1990-91	2 226 500	476 500	2 703 000	72 200	2 943 669	286 935
1991-92	2 178 100	536 800	2 684 800	69 900	2 992 560	403 642
1992-93	2 206 626	511 736	2 718 362	70 366	3 028 261	505 138
1993-94	2 231 900	506 600	2 738 500	69 600	3 047 999	n.a.
1994-95	2 277 900	518 400	2 796 300	72 600	3 073 212	n.a.
1995-96	2 335 426	(e)483 748	2 819 174	(e)69 790	3 114 404	n.a.

(a) From 1924 to 1982 the data source was the Motor Registration Branch. The Road Traffic Authority has provided this information since 1982. (b) Excludes defence service vehicles. (c) Includes ambulances and hearses until 1970-71 inclusive. (d) Includes utilities, panel vans, trucks, truck-type vehicles, omnibuses, and from 1971-72 onwards, ambulances and hearses. (e) The 1996 data are based on actual registration data only up to approximately March 1996 plus new registrations from March to October 1996.

ROAD TRAFFIC ACCIDENTS INVOLVING CASUALTIES(a), VICTORIA

Year	Persons killed	Persons injured	Rate per -	
			10,000 vehicles registered	100,000 mean population
1931	333	4 042	19.8	18.5
1941	412	7 610	16.0	21.5
1951	581	11 364	13.1	25.9
1961	773	16 757	9.2	26.7
1971	996	22 067	7.2	28.7
1972	884	21 090	6.3	25.5
1973	949	20 312	6.1	25.8
1974	877	18 634	5.0	21.9
1975	910	17 586	5.3	24.5
1976	938	17 653	5.3	24.6
1977	954	19 874	5.2	24.9
1978	869	20 377	4.6	22.5
1979	847	19 690	4.3	21.8
1980	657	19 957	3.3	16.8
1981	766	20 680	3.8	19.4
1982	709	20 293	3.2	17.8
1983	664	20 008	2.9	16.4
1984	657	21 311	2.8	16.1
1985	683	22 452	2.8	16.6
1986	668	23 274	2.7	16.0
1987	705	25 723	2.8	16.8
1988	701	(a)	2.7	16.4
1989	776	9 356	3.0	18.0
1990	548	7 084	2.1	12.5
1991	503	6 162	1.8	11.4
1992	396	5 905	1.5	8.9
1993	435	5 928	1.5	9.7
1994	378	6 043	1.4	8.4
1995	418	6 114	n.a.	n.a.
1996	410	n.a.	1.4	9.2

(a) A change of definition has resulted in this series no longer being available on the previous basis.

MELBOURNE AIRPORT, VICTORIA

Year	Domestic aircraft(a)				International aircraft(b)			
	Number of movements	Passengers		Freight handled tonnes	Number of movements	Passengers		Freight handled tonnes
		Embarked	Disembarked			Embarked	Disembarked	
1961	37 599	571 063	574 661	23 672	896	10 589	11 072	281
1962	36 354	584 471	589 395	22 467	834	10 607	12 438	283
1963	39 928	632 768	644 669	22 649	844	13 059	15 772	359
1964	46 418	743 352	753 155	25 739	1 085	17 768	20 161	447
1965	47 938	856 536	849 203	34 965	1 201	19 866	23 440	500
1966	48 243	890 043	896 483	36 850	1 120	20 425	22 359	436
1967	50 312	981 729	990 201	39 459	1 036	22 353	26 092	576
1968	50 066	1 075 898	1 069 415	40 360	1 018	23 643	25 634	688
1969	54 192	1 201 469	1 229 748	47 140	1 021	27 252	28 812	687
1970	59 050	1 343 510	1 358 451	49 272	2 165	51 035	49 438	1 862
1971	58 064	1 401 134	1 410 682	48 318	4 309	89 962	95 132	4 063
1972	59 985	1 475 295	1 475 621	47 466	5 758	135 303	144 932	5 144
1973	67 517	1 798 331	1 783 826	56 509	6 127	193 375	214 357	9 075
1974	72 037	1 994 115	1 996 732	61 187	6 390	222 738	242 759	10 732
1975	71 946	2 068 415	2 068 923	55 366	7 278	268 607	283 019	12 277
1976	68 473	2 065 897	2 063 022	60 114	7 528	318 345	335 184	15 317
1977	68 558	2 144 619	2 146 831	59 013	8 578	332 207	353 012	15 175
1978	72 308	2 335 629	2 331 760	62 919	9 485	355 064	384 207	20 112
1979	70 065	2 451 235	2 457 658	72 680	9 131	435 224	457 986	24 383
1980	72 024	2 584 254	2 589 151	69 763	9 907	468 359	503 017	28 418
1981	66 499	2 518 313	2 519 984	74 377	9 719	458 348	497 436	35 189
1982	61 102	2 414 298	2 416 548	72 678	10 710	462 458	505 544	40 734
1983	57 497	2 210 982	2 223 002	87 950	9 481	450 591	468 780	42 836
1984	57 599	2 322 043	2 324 453	91 948	10 575	513 324	560 217	54 547
1985	61 241	2 529 276	2 531 009	94 984	11 359	561 697	594 984	65 434
1986	64 196	2 615 621	2 623 446	85 798	12 516	611 950	649 970	70 495
1987	67 314	2 784 707	2 784 819	83 124	13 678	662 728	737 945	80 102
1988	69 227	3 012 143	3 021 617	88 615	13 619	739 532	799 738	82 909
1989	53 392	2 355 451	2 375 076	60 267	14 697	796 693	832 589	88 582
1990	62 428	2 940 236	2 952 622	68 805	16 042	841 469	875 722	93 155
1991	75 559	3 835 651	3 850 044	67 800	15 141	839 658	864 208	87 385
1992	79 870	3 912 949	3 925 488	67 105	15 637	864 708	873 248	93 725
1993	82 391	4 127 141	4 144 859	64 335	16 232	917 716	930 161	110 495
1994	87 187	4 609 406	4 613 481	70 158	14 763	924 320	947 188	126 291
1995	92 056	4 995 014	5 027 491	70 198	15 226	1 002 157	1 008 997	140 188

(a) Domestic aircraft movements commenced at Melbourne Airport on 20 June 1971. Domestic aircraft previously used Essendon airport. (b) International aircraft movements commenced at Melbourne Airport on 1 July 1970. International aircraft previously used Essendon airport. Scheduled international flights were suspended into Melbourne from 1965 to 30 June 1970. Melbourne returned to international status on 1 July 1970 as the new Melbourne airport was capable of handling larger modern aircraft.

COMMUNICATIONS

VICTORIAN POST OFFICE

Year	Number of letters(a) '000	Number of newspapers '000
1841	57	120
1851	504	457
1861	6 110	4 277
1871	11 716	5 173
1881	26 308	11 441

(a) Postcards were first issued in April 1876 and are included with letters.

POSTMASTER GENERAL'S DEPARTMENT, VICTORIA

Year	Letters, etc. posted in Victoria and received from overseas(a) '000	Parcels posted millions
1901	123 807	
1911	195 747	
1920-21	197 137	
1930-31	—	
1940-41	291 252	
1950-51	437 229	
1960-61	608 758	
1970-71	837 861	
1971-72	813 794	
1972-73	837 618	
1973-74	837 678	
1974-75	803 289	
1975-76(b)	697 949	
1976-77	703 148	
1977-78	650 522	
1978-79	698 085	
1979-80	744 309	
1980-81	780 997	
1981-82	800 936	
1982-83	820 919	
1983-84	838 215	
1984-85	884 575	
1985-86	914 230	
1986-87	970 168	
1987-88	1 042 035	
1988-89	1 126 082	
1989-90	1 132 886	
1990-91	r1 016 200	21.5
1991-92	r1 001 000	22.3
1992-93	r1 030 500	24.3
1993-94	r1 049 000	25.7
1994-95	r1 114 800	28.2
1995-96	r1 170 900	30.1
1996-97	r1 315 600	31.1

(a) Includes postcards, newspapers, and packets. From 1949-50 registered articles and parcels are also included. (b) From 1 July 1975 all postal services and most of the services provided by telecommunication ceased to operate as the Postmaster-General's Department and were embodied in two separate Commissions—the Australian Postal Commission (Australia Post) and the Australian Telecommunications Commission (Telecom).

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deposits	201	causes of death	100
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Reserve Bank of Australia	200	Disability and ageing	112
Barley	224	Divorces	61
Births	55	<i>see also</i> Historical Statistics	
confinements	56	Drivers' and riders' licences	261
<i>see also</i> Historical Statistics		Drug offences	134
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Births	276	industrial disputes	94
Building	289	industry and employment	88
Communications	296	job vacancies	93
Crops	286	occupation	89
Deaths	276	overtime	93
Divorces	276	participation rates	78
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employment	80
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occupation	89
overtime	93
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persons not in labour force	90
trade union membership	94
underemployment	82
unemployment	83
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Lamb production	232
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